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MORBIDITY REPORTS.

THEIR IMPORTANCE TO THE LOCAL HEALTH OFFICER AND HIS WORK.

By JOHN W. TRASK, Assistant Surgeon General, United States Public Health Service.

An address delivered before the First Annual Conference of Sanitary Officers of Arkansas, held at Little Rock, Ark., October 28-29, 1913.

The public health is second in importance only to the honesty and integrity of the people—if it is second to even these—for it is undoubtedly true that the honesty and integrity of a community or race depend in no small measure upon its health. Upon the health of a people depends also their prosperity. Modern life is in large measure competitive, and the sick can not hope to compete with advantage against the well.

You, the local health officers of Arkansas, are the men upon whom depends in large part the protection of the health of a State. You have a State department of health in charge of an able man who has made a study of health administration, but in the end he must depend largely upon you for whatever success may be attained in State health work. You are in reality a part of the machine that has for its work the prevention of disease in the State of Arkansas. As the health of each of your communities depends upon the health of all the individuals in it, so the health of the State depends upon the health of its various cities and counties. You are the men upon whom fall the duty and responsibility of preventing disease in your respective cities and counties. The State health department can not do it for you unless it displaces you and acts in your stead. You are essentially a part of the State health organization and must share in the credit for its successes and in the blame for any failures there may be. You have responsibilities to your respective communities, but your responsibilities to the State are just as great, for disease is no respecter of city or county boundaries, and the welfare of the State depends in a measure on health conditions in each of your cities and counties.

These statements apply not only to Arkansas and its local health officers, but to every State in the Union and to the local health officers of every State.

The work of the State health department, and your work as part of the department, is the prevention of disease. In preventing or controlling any disease the first thing that must be done is to find whether the disease is present, where it is, and under what conditions it is occurring. This is true, whether the disease is yellow fever or malaria, smallpox or typhoid fever, trachoma or tuberculosis, ophthalmia neonatorum, or any of the industrial diseases.

The only way in which the health officer can learn when dangerous diseases are present and where preventable diseases are occurring is by having physicians report the cases they find. Physicians go into the houses of the sick and in that way know what diseases are present. The health officer does not see the sick as the physician does, and he must therefore depend upon the latter for his information as to what diseases are present, and where they are. The satisfactory control of disease is impossible without the physician's cooperation in this way.

Every practicing physician is therefore a working part of the health department. He has a responsibility he can not avoid without doing injury to the community and likewise to the families to which he is the medical adviser, for these families are part of the community which suffers by his neglect. Practicing physicians are the skirmish line and the pickets of the health department, upon whom falls the duty of giving information of the presence of the enemy, the appearance in the community of cases of those diseases which it is the duty of the health department to control.

The work of the health officer has been undergoing a rapid change. Not so many years ago the duties of the health officer were limited to attempts to control only the graver diseases which were occasionally epidemic, such as cholera, plague, and yellow fever. The work of the health department has grown with the increased and more definite knowledge of the causes of disease which has been obtained during the last 30 years and to which additions are being constantly made.

Disease is now known not to be due to odors or decaying vegetation, to vapors from stagnant pools or to the breathing of sewer gas. Disease is known to be due either to living organisms which are spread from individual to individual by contact or by other means, or to improper conditions of living.

The work of the health officer is the prevention of disease in so far as we have knowledge as to how the disease can be prevented. His activities, therefore, are limited to the control of the preventable diseases, which, due to our increased information regarding diseases and the manner in which they are spread, is a broad field.

In the control of disease the first thing the health officer must know is what diseases are present, where the cases are, and under what conditions they are occurring. Without this information he is prac-

tically helpless. He can not control diseases unless he knows whether or not they are present, and when he knows what diseases are present he is still in large measure helpless until he knows where and under what conditions cases are occurring. If the community is to receive proper protection, the health officer must know of the occurrence and location of cases of the communicable diseases, for each case constitutes a focus from which the disease may spread to others. No one would attempt in this day and age to control scarlet fever in a town or city unless he had some means of knowing of the cases that were present, nor would he attempt to control diphtheria or yellow fever without information of existing cases. A knowledge of the occurrence of cases is just as necessary to the health officer in controlling typhoid fever or tuberculosis.

The necessity for a knowledge of the occurrence of cases in the prevention of disease is not limited to the communicable diseases. This knowledge is equally required in maladies due to improper living or working conditions. Many States are now attempting to prevent what are known as the industrial diseases and particularly the industrial poisonings, such as lead poisoning. To prevent these it is necessary to have the cases that do occur reported, for each case so reported shows the existence of conditions capable of producing the disease—conditions that should be remedied and usually can be.

In fact, attempts at the control of any disease will be in large measure ineffective unless based upon and controlled by case reports.

In health administration, morbidity reports—that is, reports of cases of sickness—serve several purposes, which may be briefly stated to be as follows:

1. In the communicable diseases morbidity reports show the occurrence of cases which constitute foci from which the disease may spread to others, as in scarlet fever, typhoid fever, tuberculosis or yellow fever, and make it possible to take proper precautions to protect the family of the patient, his associates, or the community at large.

2. In some diseases morbidity reports make it possible to see that the sick receive proper treatment, as in ophthalmia neonatorum, diphtheria, and, in certain cities, tuberculosis. The reporting of cases of ophthalmia in the newborn makes it possible to save the sight of some infants who would otherwise not receive adequate treatment until after much damage had been done. In diphtheria the health department can be of service in furnishing antitoxin. Some cities furnish hospital or other relief to consumptives who would otherwise be without proper treatment.

3. In diseases that are not communicable, such as those due to occupation or environment, reported cases show the location of conditions which are causing illness or injury. This makes it possible

to remedy the faulty conditions, so that others may not be similarly injured.

4. In certain diseases, of which the cause or means of spread is unknown, morbidity reports show their geographic distribution and varying prevalence, and the conditions under which cases occur. This information has great potential value in attempts to ascertain their causes and means of spread.

5. Reports of the occurrence of disease are necessary to show the need of certain sanitary measures or works and to control and check the efficiency of such measures or works when put into operation. In pulmonary tuberculosis such reports show the number of consumptives in the community and the need of sanatoria. In malaria they show the prevalence of the disease, the need for drainage and other antimosquito work, the efficiency of such work when in operation, and when a change in the prophylactic measures or additional ones are necessary. In typhoid fever they show faults in the water supply or in the control of the production and distribution of milk or in the disposal of excreta in special localities.

6. Morbidity reports when recorded over a period of time and properly compiled become a record of the past occurrence of disease. They show the relative prevalence of disease from year to year and under varying conditions. They show the effect of the introduction of public-health measures and of sanitary works. They give a history of disease not obtainable in their absence.

To do efficient work as health officers you will need to know at all times which of the preventable diseases are present in your respective communities, and how prevalent they are, and, when you get down to the work of really controlling any one of them, you will immediately want to know where the cases are.

The State has made it possible for you to have this information by requiring that physicians shall report to you all cases of certain diseases coming to their knowledge. The enforcement of this measure, however, in your respective counties and cities has been placed in your hands, so that you, and you alone, are to blame if the cases are not reported and you do not know at all times the status of these diseases within your jurisdictions. In securing these reports you will have the cooperation of every law-abiding or public-spirited physician practicing in your city or county. The people of Arkansas have, through their legislature and State board of health, made it a misdemeanor for a physician to fail to report to you every recognized case of certain designated diseases among his patients, and have fixed as a penalty for such failure a fine of not to exceed \$100, or imprisonment for not to exceed one month, or both fine and imprisonment.

This penalty is intended, of course, only for those who would not otherwise obey the law, and there should be few physicians requiring its application. Every intelligent physician will readily understand that these reports are necessary for the proper protection of his own patients as well as the community in general. He will also not want to be responsible for neglecting to report his cases of scarlet fever, diphtheria, and tuberculosis, for he will know that if others contract the disease from these unreported cases he is probably responsible, and not only responsible for the cases but for any deaths there may be among them. Every physician has a number of families who look to him as their medical adviser. His failure to report a case of a communicable disease in one of these households may result in the infection being spread, directly or indirectly, to other households among his clientele. His own patients would therefore suffer by his neglect and he would be true neither to his patients nor to the community, besides being a criminal in the eyes of the law. He would be violating the spirit of his ethical code and his citizenship.

You should, and undoubtedly will, receive the sincere cooperation of every physician worthy of your respect, and we trust that there are none otherwise in the State of Arkansas.

For the same reason that the practicing physician should report his cases of the notifiable diseases to you, you should report the cases occurring in your city or county to the State department of health. The State health department should at all times have information of the occurrence and relative prevalence of the preventable diseases throughout the State. If you fail to give this information to the State health department, you are as culpable as the physician who does not report his case to you. In fact you are probably more to blame, because you should more thoroughly realize its importance. It is only when the State department of health knows of the status of disease throughout the State that it can fulfill its proper functions. The reports received from the various cities and counties make it possible for your State health officer to know when there are threatened epidemics and to notify you, so that you can take necessary measures to protect your respective communities. They enable him to know when disease is unusually prevalent and when extraordinary measures are indicated. It enables him also to keep you informed, by printed bulletin or otherwise, of the prevalence of disease in your vicinity and throughout the State; for it is important in your work that you know of the prevalence of disease in neighboring localities as well as in your own.

Your State health officer and you, as adjuncts of the State health department, will be interested in knowing of the occurrence of epidemics and the general prevalence of the preventable diseases in

adjoining States. This will be of value in giving you early information of approaching epidemics, and will also enable you to compare the prevalence of disease in Arkansas with that in other States. For this purpose the health authorities of the several States in conference with the Federal Public Health Service adopted a plan whereby the State health departments that have the information report regularly to the Federal Public Health Service the reported prevalence of disease in their respective States. These reports are published in the Public Health Reports and sent to all persons engaged in health work who request it.

In conclusion, allow me to repeat that the success of your administration and the amount of protection you are able to give to the health of your respective cities and counties will depend largely upon the extent to which you know what preventable diseases are present, their prevalence, and the conditions under which the cases are occurring; that this information can be obtained only through reported cases; and that it depends upon you more than anyone else as to whether you will have this knowledge.

FLIES AS CARRIERS OF LAMBLIA SPORES.

THE CONTAMINATION OF FOOD WITH HUMAN EXCRETA.

By C. W. STILES, Professor of Zoology, and WM. S. KEISTER, Assistant, Hygienic Laboratory, United States Public Health Service.

In a former article, one of us¹ invited attention to the fact that the presence of certain protozoa (*Entamoeba coli*, *Lamblia*, and *Trichomonas*), in the human intestine, gives us an easy and a practical method of demonstrating that the person in question has swallowed human excreta.

The argument in support of this conclusion is as follows: These protozoa are obligatory parasites, having no free motile stage; the stage outside the body is a spore, characteristic for each one of the separate forms; despite the older literature there is nothing at present to prove that these three species of parasites are characteristic for any host other than man, although generically identical but specifically distinct forms are known for other animals (for instance, *Entamoeba muris* in mice, species of *Lamblia* in mice, rats, etc., formerly identified as identical with the species in man, but more recently considered as distinct, and various species of *Trichomonas* reported for frogs, swine, etc.); even if it be admitted that some of the forms in animals other than man are specifically identical with the forms in man, this would not invalidate the gen-

¹ Stiles, 1913, Contamination of food supplies. The value of protozoa as an aid in determining fecal contamination of the food supply. Public Health Reports, vol. 28, No. 7, Feb. 14, 1913, pp. 290-291.

eral argument; these organisms (with the theoretical but academic possible exception of infection by *Trichomonas* into the uro-genital system by coitus) leave the body normally only in discharges (*Entamæba coli* and *Lambliæ* in the feces, *Trichomonas* in the feces, or in the vaginal discharge, or in the urine); they enter the body in spore form (*Entamæba coli* and *Lambliæ* only through the mouth, *Trichomonas* through the mouth but exceptionally *per vaginam* or *urethram* through coitus); for practical purposes it may be said that the parasites (*Entamæba*, *Lambliæ*, and *Trichomonas*) leave the body with the feces, through the anus and enter it in spore form through the mouth, although *Trichomonas* may leave the body through the urine and the vaginal discharge and probably may enter the uro-genital passages through coitus; ergo, if a person shows in his feces either *Entamæba coli*, *Lambliæ*, or *Trichomonas*, that person has swallowed spores that have come from the excreta, hence that person has eaten excreta, for it would be practically impossible to separate the spores absolutely from the excreta.

Accepting the more recent work as showing that the species in man are distinct from those in animals, the conclusion is that the infected person has eaten human excreta.

Accepting the older view that the forms in man are specifically identical with those of rats, rabbits, and other animals, the conclusion is that the person in question has eaten excreta either of man or of some other animal.

This latter point is to our mind almost negligible, from the standpoint of the region in which we are working.

The question as to the method of transmission from the feces of one person to the mouth of another must be considered.

It has been rather generally assumed that infection occurs either through water or through vegetables. That either or both of these methods of transmission may or might occur may be admitted, but the points should be recalled that both methods are based upon hypothesis, and even if the hypothesis be correct, the water or the vegetables carrying the spores must have been contaminated from excreta (since these organisms are obligatory parasites, without any free reproducing stage); hence the water or the vegetables have acted only as mechanical carriers of diluted excreta.

We have been persuaded that for the region in which we are working another method of transmission is for all practical purposes the chief method, namely, mechanical transmission by flies from the feces—usually in surface privies—to the food in the kitchen or dining room.

In a certain village there are approximately 100 houses; each house is provided with a surface privy in the back yard; flies breed by the thousands in these privies and fly to the houses. In this village we have found that the protozoa in question are exceedingly

common among the children; it has not been unusual, for instance, to find that 50 to 100 per cent of the specimens of feces collected from the families contain the protozoa in question.

To assume that the infections take place in this village by means of the water presupposes that these nonmotile spores travel through a layer of sand a distance of more than 100 feet to a driven well; this assumption does not seem justified.

That the children might get their hands soiled with feces, directly or indirectly, from the privies, is conceivable; but this method of infection seems less probable than the fly method, since the children in this particular village rarely pass through the alley between the privies; that infection per hands might take place, as for instance, from soiled privy seats, is to be admitted.

That cats, dogs, rats, and chickens might spread the fecal material is to be admitted, but such admission would not weaken the idea of fly transmission.

Turning now to the idea that flies play an important rôle as mechanical transmitters of these protozoa, the following points should be considered:

As already stated, flies breed and feed by the thousands in these surface privies; and they fly to the kitchens that are near by. For instance, in 24 hours' time 293 flies¹ were caught in a Hodge fly trap placed in one of these privies, and 1,742 flies were caught during the same 24 hours in another fly trap placed in the corresponding kitchen, about 40 feet away.

Further, flies were seen passing to and fro between the privies and the kitchens.

With this constant exchange of flies between the feces in the privy and the food in the kitchen, the possibility is given of a daily smearing of the food with small particles of fecal material on the bodies or legs of the flies. The carriage of lime by flies from privies to food is too well known to call for discussion. Since the spores in question are smaller than the particles of lime, there seems no reason to doubt that these spores also are carried by the flies. The process seems so self-evident that a laboratory demonstration of the fly as an actual carrier may be viewed as almost superfluous. Nevertheless, experiments to demonstrate the point in question were made.

Flies caught in the houses and in the privies were examined, but with negative result. When we considered the minute size of the spores (*Entamæba coli* about 15μ in diameter, *Lambliæ* about 10 by 7μ , *Trichomonas* with adults 4 to 15μ long by 3 to 4μ broad), these negative findings are not surprising.

In order to obtain a number of flies that were known to have visited infected excreta a specimen of human feces containing a large

¹ Stiles and Miller, The ability of fly larvae to crawl through sand. Public Health Reports, vol. 26, No. 43, Aug. 25, 1911, p. 1277.

number of *Lamblia* cysts was diluted with sterile water, stirred to an even consistency, sprinkled with a small amount of brown sugar (in order to attract additional flies), and used as bait in a Hodge fly trap, which was placed in a barn. The several hundred flies that were caught during 24 hours were etherized and transferred from the trap to a clean test tube containing some sterile water. After the tube was thoroughly shaken some of the water was centrifugalized for about 5 minutes. The sediment was then examined under an oil-immersion lens, and 6 *Lamblia* cysts were found.

Thus it is demonstrated that the fly is capable of carrying the spores of *Lamblia*. If flies can carry *Lamblia* spores measuring 10 by 7 μ , and bacteria that are much smaller, and particles of lime that are much larger, there is no ground to assume that flies may not carry *Entamæba* and *Trichomonas* spores.

Admitting the possibility of the transmission of these spores by various methods (flies, rats, dogs, hands, vegetables, water, etc.), whatever the method that occurs in any particular case, the presence of the protozoa in question means that the person showing the infection has been eating excreta; ergo, when a person harbors any one of these protozoa we have proof that there is something wrong with the sanitary conditions, either at or near the house where this person lives or has lived or elsewhere in some place influencing the life of said person.

If there is a surface privy in the back yard of the house or of the house next door to where the infected person lives, this is the nearest place that comes into consideration, and although we have no proof that the particular infection found actually came from that particular privy we have a demonstration that he has actually swallowed excreta and that the conditions are favorable at his residence for a continuation of this diet as a daily routine.

Turning now to practical experience in examining for these protozoa we have found the following infections in the examination of one series of 187 unselected persons:

Result of examination.	People living in homes—			
	Without privy.		With privy.	
	Number.	Per cent.	Number.	Per cent.
Negative.....	88	80	54	70
Protozoa present.....	22	20	23	30
Total.....	110	100	77	100
Protozoa found:				
Entamæba coli.....	9	8	6	8
Lamblia.....	9	8	14	18
Trichomonas.....	2	2	3	4
Undetermined genus.....	2	2		

Thus those persons (chiefly children) living (chiefly in the city) at houses provided with a privy showed 30 per cent infection as against 20 per cent among persons (chiefly children) living at houses not provided with a privy but connected with the sewer; in all or practically all of the latter cases, however, privies were found in the same or in the adjoining block of houses; hence these people were still subject to the possibility of fly-borne infection, although the chances were slightly reduced.

Taking all of the 187 persons together it is seen that 43 of them (23 per cent) had been eating excreta, apparently human excreta.

Practical application of the test.—We are using this test in a practical way to induce people to improve the sanitation. Upon finding the infection present we notify the mother of the child that the microscopic examination shows that her child has swallowed excreta, probably in food contaminated by flies, from some surface privy; we advise her to request the local health officer to inspect the block in which she lives to determine whether there is any insanitary privy near her, supplying her table with contaminated flies, which might continue the infections to her child or to other members of the family.

The mother sees some privy in a near-by backyard, sees—as she never saw before—the danger of the surface privy, and she demands an improvement in the sanitation.

Of all methods by which we have tried to arouse sentiment against the surface privy, we know of none equal to this in promptness of result.

The possible exceptions to the fly transmission do not worry us. The water here is sand-filtered and can scarcely play an important rôle. Flies can and do carry the infections; we demonstrate the presence of the infection; the mother sees the privy and the flies, and she sees that the possibility of continued infection is ever present in this climate.

In case of necessity we occasionally tell the family that we can not prove whether the infection came from the privy of a white family or of a negro family, and this statement tends to add to the desire to have the insanitary privies made sanitary.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

SMALLPOX.

State Reports for October, 1913.

Places.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California:						
Alameda County—						
Oakland.....	1				1	
Kern County—						
Bakersfield.....	5				5	
Los Angeles County.....	1				1	
Los Angeles.....	5			1	4	
Nevada County—						
Nevada City.....	8				8	
San Francisco County—						
San Francisco.....	1				1	
San Joaquin County.....	2				2	
Stockton.....	7				7	
Sacramento County—						
Sacramento.....	1				1	
Santa Clara County—						
San Jose.....	1				1	
Santa Clara.....	1				1	
Stanislaus County—						
Modesto.....	2				2	
Total.....	35			1	34	
Massachusetts:						
Bristol County—						
Mansfield.....	2				2	
Worcester County—						
Webster.....	5			2	2	1
Total.....	7			2	4	1
Michigan:						
Antrim County—						
Mancelona.....	18			2	16	
Calhoun County—						
Marshall.....	1				1	
Cheboygan County—						
Baegrand Township....	2			1	1	
Dickinson County—						
Breen Township.....	5			1	4	
Emmet County—						
Petoskey.....	5			3		2
Ingham County—						
Lansing.....	2					

SMALLPOX—Continued.

State Reports for October, 1913—Continued.

Place.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan—Continued.						
Isabella County—						
Isabella Township.....	3				3	
Kalamazoo County—						
Climax Township.....	1					1
Kalkaska County—						
Kalkaska.....	1					1
Mackinac County—						
Garfield Township.....	1				1	
Mackinac Island.....	1					1
Marquette County—						
Powell Township.....	6				6	
Ishpeming.....	1				1	
Marquette.....	18					18
Negaunee.....	1			1		
St. Clair County—						
Emmett Township.....	1				1	
Schoolcraft County—						
Manistique.....	1					1
Wayne County—						
Detroit.....	19				19	
Hamtramck Township..	3				3	
Total.....	90			8	56	26
Minnesota:						
Becker County—						
Detroit.....	2				2	
Clay County—						
Felton Township.....	1				1	
Dakota County—						
Inver Grove.....	1				1	
Fillmore County—						
Holt Township.....	2				2	
Hennepin County—						
Minneapolis.....	9				9	
Lyon County—						
Balaton.....	1		1			
Mower County—						
Brownsdale.....	2				2	
Red Rock Township...	1				1	
Udolpho Township.....	1				1	
Waltham Township.....	6			1	5	
Nicollet County—						
St. Peter.....	4				3	
Ottertail County—						
Henning.....	1				1	
Polk County—						
Queen Township.....	1					1
Rice County—						
Faribault.....	4				4	
St. Louis County—						
Breitung Township.....	1				1	
Duluth.....	3				3	
Missabe Mountain						
Township.....	1				1	
Virginia.....	71		2	1	64	4
Wadena County—						
Sebeka.....	1					1
Wadena.....	1				1	
Total.....	114		3	2	102	7
Ohio:						
Allen County.....	29					29
Ashland County—						
Ashland.....	1					1
Athens County.....	8				8	
Butler County—						
Hamilton.....	10				10	
Delaware County.....	1					1
Franklin County.....	59				20	39

SMALLPOX—Continued.

State Reports for October, 1913—Continued.

Place.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Ohio—Continued.						
Gallia County.....	2	.....	.....	.....	.....	2
Greene County.....	2	.....	.....	.....	.....	2
Hamilton County—						
Cincinnati.....	2	.....	.....	.....	2	.....
Highland County.....	1	.....	.....	.....	1	.....
Lucas County.....	12	.....	.....	.....	5	7
Marion County.....	27	.....	.....	.....	14	13
Meigs County.....	4	.....	.....	.....	.....	4
Putnam County.....	21	.....	.....	.....	1	20
Scioto County.....	7	.....	.....	.....	.....	7
Summit County—						
Akron.....	6	.....	.....	.....	.....	6
Union County.....	6	.....	.....	.....	2	4
Van Wert County.....	2	.....	.....	.....	1	1
Total.....	200	.....	.....	.....	61	136

Massachusetts—Vineyard Haven.

Acting Asst. Surg. Worth, of the Public Health Service, reported by telegraph that during the period from November 19 to 24, 1913, 10 cases of smallpox had been notified in Vineyard Haven, Mass., making a total of 17 cases reported since the beginning of the outbreak.

New York—Niagara Falls.

Acting Asst. Surg. Bingham, of the Public Health Service, reported by telegraph that during the week ended November 22, 1913, 10 new cases of smallpox had been notified in Niagara Falls, N. Y.

South Carolina—Georgetown.

Acting Asst. Surg. Mooror, of the Public Health Service, reported November 17, 1913, that during the two weeks from November 3 to 17, 1913, 11 cases of smallpox had developed in Georgetown, S. C.

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Indiana (Oct. 1-31):			Indiana—Continued.		
Counties—			Counties—Continued.		
Crawford.....	9	.....	Owen.....	2	.....
Dubois.....	2	.....	Parke.....	9	.....
Elkhart.....	6	.....	Pulaski.....	1	.....
Floyd.....	14	.....	St. Joseph.....	5	1
Grant.....	.....	1	Wabash.....	1	1
Lake.....	1	.....	Wayne.....	1	.....
Marion.....	7	.....		
Miami.....	14	.....	Total.....	73	3
Noble.....	1	.....		

SMALLPOX—Continued.

Miscellaneous State Reports—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Oregon (Sept. 1-30): ¹			Virginia (Oct. 1-31)—Contd.		
County—			Counties—Continued.		
Coos.....	1		Henrico.....	1	
Utah (Oct. 1-31):			Mecklenburg.....	3	
Counties—			Montgomery.....	23	
Cache.....	1		Nansemond.....	31	
Davis.....	6		Roanoke.....	4	
Millard.....	1		Washington.....	1	
Salt Lake.....	19		Total.....	87	
San Pete.....	15				
Sevier.....	13		Washington (Oct. 1-31):		
Utah.....	18		Counties—		
Weber.....	26		Columbia.....	7	
Total.....	99		Cowlitz.....	7	
Virginia (Oct. 1-31):			King.....	2	
Counties—			Pacific.....	1	
Bedford.....	3		Pierce.....	22	
Buchanan.....	3		Snohomish.....	1	
Campbell.....	2		Spokane.....	22	
Greenville.....	16		Total.....	62	

¹ Not included in report, p. 2409.

City Reports for Week Ended Nov. 8, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.....	5		Nashville, Tenn.....	2	
Chicago, Ill.....	2		Niagara Falls, N. Y.....	4	
Cincinnati, Ohio.....	1		Reading, Pa.....	2	
Everett, Mass.....	1	1	South Bend, Ind.....	3	
Kansas City, Kans.....	2		Spokane, Wash.....	8	
Los Angeles, Cal.....	1		Toledo, Ohio.....	8	
Milwaukee, Wis.....	6		Zanesville, Ohio.....	1	

TYPHOID FEVER.

State Reports for October, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California:		California—Continued.	
Alameda County—		Los Angeles County.....	1
Alameda.....	1	Long Beach.....	3
Berkeley.....	2	Los Angeles.....	60
Hayward.....	1	Pomona.....	1
Oakland.....	49	San Fernando.....	1
Piedmont.....	2	Sawtelle.....	1
Pleasanton.....	1	San Gabriel.....	2
Colusa County.....	4	Redondo Beach.....	1
Contra Costa County—		Mariposa County.....	1
Richmond.....	1	Mendocino County.....	1
El Dorado County—		Fort Bragg.....	1
Placerville.....	1	Wilets.....	1
Fresno County.....	2	Ukiah.....	1
Coalinga.....	1	Monterey County.....	7
Fowler.....	2	Monterey.....	4
Fresno.....	5	Salinas.....	1
Humboldt County—		Napa County—	
Eureka.....	4	Napa.....	1
Imperial County—		Orange County—	
El Centro.....	8	Fullerton.....	2
Lassen County.....	3	Orange.....	1

TYPHOID FEVER—Continued.

State Reports for October, 1913—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California—Continued.		Indiana—Continued.	
Placer County—		Miami County.....	1
Rocklin.....	1	Monroe County.....	4
Plumas County.....	1	Montgomery County.....	3
Riverside County—		Morgan County.....	4
Corona.....	1	Newton County.....	3
Riverside.....	1	Noble County.....	3
Sacramento County—		Orange County.....	1
Sacramento.....	23	Owen County.....	9
San Benito County.....	5	Parke County.....	13
San Bernardino County.....	2	Perry County.....	10
San Diego County—		Pike County.....	2
National City.....	2	Posey County.....	3
San Diego.....	1	Pulaski County.....	13
San Francisco County—		Putnam County.....	3
San Francisco.....	54	Randolph County.....	14
Santa Clara County—		Ripley County.....	25
Mayfield.....	1	Rush County.....	2
Palo Alto.....	1	Steuben County.....	9
San Joaquin County—		St. Joseph County.....	21
Lodi.....	1	Tippecanoe County.....	6
Siskiyou County.....	1	Tipton County.....	1
Sonoma County—		Union County.....	2
Petaluma.....	1	Vanderburg County.....	21
Santa Rosa.....	1	Vermillion County.....	5
Sonoma.....	1	Vigo County.....	4
Solano County—		Wabash County.....	4
Benicia.....	2	Warren County.....	4
Stanislaus County.....	2	Washington County.....	10
Newman.....	2	Wayne County.....	53
Yolo County.....	1	White County.....	9
Wheatland.....	1		
Total.....	284	Total.....	486
Indiana:		State of Maryland (exclusive of Baltimore City):	
Adams County.....	6	Allegheny County—	
Bartholomew County.....	3	Cumberland.....	52
Carroll County.....	1	Western Maryland Hospital.....	3
Cass County.....	8	Allegheny Hospital.....	5
Clay County.....	16	Western Port.....	2
Clinton County.....	2	Corriganville.....	1
Crawford County.....	1	Barton.....	2
Davless County.....	8	Eckhart Mines.....	1
Dearborn County.....	3	Near Cumberland.....	1
Decatur County.....	1	Anne Arundel County—	
Dekalb County.....	3	Curtis Bay.....	2
Dubois County.....	4	Annapolis.....	2
Elkhart County.....	12	Deale.....	6
Fayette County.....	1	Jewell.....	1
Floyd County.....	7	Churchton.....	1
Franklin County.....	30	Fairfield.....	1
Fulton County.....	4	Brooklyn R. F. D.....	7
Gibson County.....	3	Glenburnie.....	4
Greene County.....	6	Millersville R. F. D.....	2
Hamilton County.....	6	Severn R. F. D.....	2
Hancock County.....	3	Annapolis Neck.....	1
Hendricks County.....	2	Friendship.....	1
Henry County.....	3	Shady Side.....	1
Huntington County.....	3	Baltimore County—	
Jackson County.....	5	Towson.....	4
Jay County.....	4	Brooklandville.....	1
Jefferson County.....	2	Lutherville.....	1
Jennings County.....	4	Ruxton.....	1
Johnson County.....	3	Rodgers Forge.....	1
Knox County.....	3	Govans.....	8
Kosciusko County.....	14	Texas.....	1
Lagrange County.....	8	Sparks.....	2
Lake County.....	1	Phoenix.....	2
Laporte County.....	3	Granite.....	1
Lawrence County.....	19	Parkton R. F. D.....	1
Madison County.....	6	Parkton.....	3
Marion County.....	3	White Hall.....	1
Marshall County.....	7	Sparrows Point.....	5
Martin County.....	6	Edgemere.....	1
		Highlandtown.....	14

TYPHOID FEVER—Continued.

State Reports for October, 1913—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
State of Maryland (exclusive of Baltimore City)—Continued.		State of Maryland (exclusive of Baltimore City)—Continued.	
Baltimore County—Continued.		Harford County—	
Relay.....	1	Havre de Grace.....	5
St. Agnes Hospital.....	3	Joppa.....	1
St. Denis.....	1	Howard County—	
Lansdowne.....	1	Elk Ridge.....	3
Arlington.....	7	Kent County—	
Glencoe.....	1	Kennedyville.....	1
West Forest Park.....	1	Kennedyville R. F. D.....	1
Mount Hope.....	1	Chestertown.....	1
Chase.....	1	Golts.....	1
Calvert County—		Millington.....	2
Lower Marlboro.....	2	Montgomery County—	
Mount Harmony.....	1	Derwood R. F. D.....	1
Sunderland.....	1	Prince Georges County—	
Owings.....	1	Laurel.....	2
Paris.....	1	Brentwood.....	1
Mount Harmony.....	1	Silver Hill.....	3
Willows.....	1	Accokeek.....	1
Caroline County—		Groome.....	1
Preston R. F. D.....	1	Brandywine.....	2
Hobbs.....	1	Clinton.....	1
Denton.....	1	Hyattsville R. F. D.....	1
Henderson.....	1	Riverdale.....	1
Ridgely.....	2	Suitland.....	1
Preston.....	1	Queen Annes County—	
Marydel.....	1	Millington R. F. D.....	7
Carroll County—		Centreville.....	2
Union Bridge.....	3	Crumpton.....	2
Westminster.....	1	Millington.....	1
Eldersburg.....	1	Stevensville.....	5
Woodbine.....	1	Centreville R. F. D.....	2
Cecil County—		Ridgely R. F. D.....	1
Perryville.....	3	Chestertown R. F. D.....	1
North East.....	4	Ruthsburg.....	1
Port Deposit.....	2	Starr.....	1
Rising Sun.....	1	Chester.....	2
Elkton.....	1	Somerset County—	
Cecilton.....	1	Crisfield.....	7
Charles County—		Upper Fairmount.....	2
Bryantown.....	1	Marion.....	4
Marbury.....	1	Princess Anne.....	1
Rison.....	1	Talbot County—	
Welcome.....	2	Easton.....	3
Bel Alton.....	2	Trappe.....	3
Port Tobacco.....	1	Washington County—	
Dorchester County—		Hancock.....	5
Cambridge.....	11	Hagerstown.....	11
Cambridge R. F. D.....	7	Dargan.....	1
Lakesville.....	3	Fiddlersburg.....	1
Maple Dam.....	1	Brownsville.....	1
Hurlock.....	2	Big Pool.....	1
Hills Point.....	2	Smithsburg.....	1
Aireys.....	2	Edgemont.....	1
Wingate.....	1	Keppryst.....	1
Frederick County—		Sharpsburg.....	1
Brunswick.....	10	Boonsboro.....	1
Teagaville.....	1	Reid.....	1
Petersville.....	1	Wicomico County—	
New Market.....	1	Salisbury.....	8
Middletown.....	6	Fruitland.....	3
Knoxville.....	2	Nanticoke.....	3
Myersville.....	1	Total.....	407
Creagerstown.....	1		
Mount Zion.....	1		
Frederick.....	1		
Walkersville.....	2		
Utica Mills.....	1		
Garrett County—			
Oakland.....	14	Massachusetts:	
Oakland R. F. D.....	4	Barnstable County—	
Ottaway.....	3	Eastham.....	1
Accident.....	1	Berkshire County—	
New Germany.....	5	Adams.....	12
Bloomington.....	1	Becket.....	1
Bloomington R. F. D.....	2	Great Barrington.....	1
Crellin.....	1	Lenox.....	2
		North Adams.....	11
		Pittsfield.....	2

TYPHOID FEVER—Continued.

State Reports for October, 1913—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Massachusetts—Continued.		Massachusetts—Continued.	
Bristol County—		Worcester County—Continued.	
Dartmouth.....	1	Leominster.....	1
Fall River.....	14	Northbridge.....	2
Freetown.....	3	Phillipston.....	1
New Bedford.....	15	Sutton.....	1
North Attleboro.....	1	Worcester.....	8
Dukes County—		Total.....	365
Edgartown.....	1		
Essex County—		Michigan:	
Amesbury.....	3	Alger County—	
Beverly.....	3	Munising.....	1
Danvers.....	1	Allegan County—	
Haverhill.....	10	Hopkins Township.....	1
Lawrence.....	4	Otsego.....	1
Lynn.....	11	Wayland.....	1
Marblehead.....	2	Alpena County—	
Newburyport.....	6	Alpena.....	10
Peabody.....	2	Barry County—	
Rockport.....	1	Carleton Township.....	1
Rowley.....	1	Woodland Township.....	1
Salem.....	2	Nashville.....	1
Saugus.....	2	Hastings.....	1
Swampscott.....	1	Benzie County—	
Franklin County—		Elberta.....	1
Greenfield.....	1	Berrien County—	
Montague.....	2	Benton Township.....	2
Orange.....	1	Watervliet Township.....	1
Hampden County—		Weesaw Township.....	2
Chicopee.....	1	Benton Harbor.....	2
Holyoke.....	2	Branch County—	
Monson.....	1	Coldwater.....	1
Palmer.....	1	Calhoun County—	
Russell.....	2	Clarendon Township.....	1
Springfield.....	12	Marengo Township.....	1
Westfield.....	8	Battle Creek.....	2
Hampshire County—		Chippewa County—	
Amherst.....	2	Sault Ste. Marie.....	1
Williamsburg.....	1	Clare County—	
Middlesex County—		Grant Township.....	1
Cambridge.....	10	Crawford County—	
Carlisle.....	1	Grayling.....	2
Everett.....	6	Eaton County—	
Frammingham.....	1	Charlotte.....	1
Lowell.....	11	Grand Ledge.....	4
Malden.....	1	Genesee County—	
Medford.....	2	Flint.....	3
Melrose.....	2	Gogebic County—	
Natick.....	1	Bessemer Township.....	1
Newton.....	2	Gratiot County—	
Somerville.....	15	Ithaca Township.....	1
Waltham.....	1	Gladwin County—	
Watertown.....	2	Butman Township.....	1
Wayland.....	1	Sage Township.....	1
Woburn.....	2	Hillsdale County—	
Norfolk County—		Allan Township.....	1
Brookline.....	2	Woodbridge Township.....	2
Canton.....	1	Wright Township.....	1
Dedham.....	2	Reading.....	1
Quincy.....	1	Houghton County—	
Wellesley.....	1	Duncan Township.....	5
Plymouth County—		Huron County—	
Brookton.....	6	Port Austin Township.....	4
Hanover.....	1	Ingham County—	
Plymouth.....	2	Lansing.....	13
Suffolk County—		Mason.....	1
Boston.....	118	Ionia County—	
Chelsea.....	1	Danby Township.....	1
Revere.....	1	Easton Township.....	1
Winthrop.....	2	Belding.....	1
Worcester County—		Ionia.....	1
Athol.....	2	Iron County—	
Clinton.....	3	Crystal Falls.....	3
Fitchburg.....	2	Isabella County—	
Gardner.....	1	Coldwater Township.....	1

TYPHOID FEVER—Continued.

State Reports for October, 1913—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Michigan—Continued.		Minnesota:	
Jackson County—		Aitkin County—	
Brookline.....	1	Hazelton Township.....	1
Kalamazoo County—		Nordland Township.....	1
Kalamazoo.....	1	Spencer Township.....	1
Kent County—		Anoka County—	
Alpine Township.....	1	Anoka.....	1
Brown Township.....	1	Anoka Township.....	1
Grand Rapids Township.....	2	Beltrami County—	
Grand Rapids.....	12	Bemidji.....	1
Lapeer County—		Blue Earth County—	
North Branch.....	1	Ceresco Township.....	1
Lapeer.....	1	Mankato.....	2
Lenawee County—		Carlton County—	
Macon Township.....	1	Cloquet.....	1
Ogden Township.....	3	Chisago County—	
Livingston County—		Sunrise Township.....	1
Brighton.....	1	Clay County—	
Fowlerville.....	1	Moorhead.....	3
Manistee County—		Cottonwood County—	
Brown Township.....	1	Storden Township.....	1
Manistee.....	3	Westbrook Township.....	1
Marquette County—		Windom.....	1
Ishpeming Township.....	1	Crow Wing County—	
Ishpeming.....	2	Brainerd.....	2
Mason County—		Dakota County—	
Freesoil Township.....	1	Burnsville Township.....	1
Ludington.....	2	Douglas County—	
Chippewa Township.....	2	Alexandria.....	3
Mecosta County—		Fillmore County—	
Lasalle Township.....	2	Newberg Township.....	3
Monroe County—		Goodhue County—	
Montcalm County—		Burnside Township.....	1
Lakeview.....	1	Red Wing.....	1
Muskegon County—		Heanepin County—	
Ravenna Township.....	1	Champlin Township.....	1
Oakland County—		Greenwood Township.....	1
Holly.....	1	Minneapolis.....	33
Pontiac.....	1	Osseo.....	1
Oceana County—		Isanti County—	
Crystal Township.....	4	Spring Vale Township.....	1
Newfield Township.....	1	Itasca County—	
Hart.....	1	Nashauk.....	1
Otsego County—		Kandiyohi County—	
Dover Township.....	1	Willmar.....	2
Ottawa County—		Kittson County—	
Olive Township.....	2	Northeote.....	4
Presque Isle County—		Lake County—	
Baringer Township.....	1	Two Harbors.....	4
Onaway.....	2	Township 63, range 11.....	1
Saginaw County—		Marshall County—	
Albee Township.....	1	Argyle.....	1
Fremont Township.....	1	Meeker County—	
Taymouth Township.....	1	Collinwood Township.....	1
St. Charles.....	4	Grove City.....	1
St. Clair County—		Litchfield.....	1
Casco Township.....	3	Swede Grove Township.....	1
Port Huron.....	3	Morrison County—	
Sanilac County—		Little Falls.....	3
Wheatland Township.....	1	Ripley Township.....	2
Port Sanilac.....	3	Mower County—	
Shiawassee County—		Austin.....	1
Owosso Township.....	1	Lyle.....	1
Van Buren County—		Nicollet County—	
Hartford.....	2	St. Peter.....	4
South Haven.....	1	Nobles County—	
Washtenaw County—		Bloom Township.....	2
Dexter.....	1	Leota Township.....	1
Wayne County—		Norman County—	
Greenfield Township.....	4	Spring Creek Township.....	1
Highland Park.....	1	Olmsted County—	
Plymouth.....	2	Rochester.....	3
Detroit.....	26	Simpson Township.....	1
Wyandotte.....	12	Otter Tail County—	
Total.....	206	Fergus Falls.....	1
		Henning.....	1
		Heaning Township.....	1

TYPHOID FEVER—Continued.

State Reports for October, 1913—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Minnesota—Continued.		Ohio:	
Pipestone County—		Adams County.....	7
Gray Township.....	1	Allen County.....	16
Polk County—		Ashland County.....	15
Fanny Township.....	1	Ashtabula County.....	5
Fertile.....	1	Athens County.....	19
McIntosh.....	2	Auglaize County.....	9
Woodside Township.....	2	Belmont County.....	17
Ramsey County—		Brown County.....	7
St. Paul.....	26	Butler County.....	7
Red Lake County—		Carroll County.....	11
Lambert Township.....	2	Champaign County.....	2
Redwood County—		Clark County.....	12
Three Lakes Township.....	1	Clermont County.....	14
Rice County—		Clinton County.....	15
Forest Township.....	1	Columbiana County.....	15
Northfield.....	7	Coshocton County—	
St. Louis County—		Coshocton.....	2
Aurora.....	1	Crawford County.....	8
Duluth.....	41	Cuyahoga County—	
Ely.....	10	Cleveland.....	46
Eveleth.....	3	Darke County.....	3
Fall Lake.....	6	Defiance County.....	22
Hibbing.....	3	Delaware County.....	9
Iron Junction.....	1	Erie County.....	4
Meadowlands Township.....	1	Fairfield County.....	13
Mesaba.....	2	Fayette County.....	17
Missabe Mountain Township.....	1	Franklin County.....	25
Tower.....	1	Fulton County.....	3
Virginia.....	11	Gallia County.....	10
Scott County—		Greene County.....	2
Belle Plaine Borough.....	1	Guernsey County.....	10
Stearns County—		Hamilton County.....	28
Paynesville.....	1	Hancock County.....	11
St. Cloud.....	1	Hardin County.....	1
Steele County—		Harrison County.....	16
Blooming Prairie.....	1	Henry County.....	2
Owatonna.....	1	Highland County.....	1
Swift County—		Hocking County.....	14
Camp Lake Township.....	1	Holmes County.....	3
Wabasha County—		Huron County.....	5
Minneiska.....	1	Jackson County.....	15
Washington County—		Jefferson County.....	4
Forest Lake Township.....	1	Knox County.....	5
Watsonwan County—		Lawrence County.....	3
St. James.....	4	Licking County.....	7
Wright County—		Logan County.....	14
Woodland Township.....	1	Lorain County.....	13
Yellow Medicine County—		Lucas County.....	54
Hanley Falls.....	1	Madison County.....	1
Swede Prairie Township.....	1	Mahoning County.....	18
Total.....	244	Marion County.....	9
North Dakota:		Medina County.....	6
Barnes County.....	4	Meigs County.....	2
Bottineau County.....	3	Mercer County.....	8
Burleigh County.....	2	Miami County.....	9
Cavalier County.....	3	Monroe County.....	9
Foster County.....	2	Montgomery County.....	34
Golden County.....	8	Morgan County.....	9
Grand Forks County.....	10	Morrow County.....	4
Griggs County.....	1	Muskingum County.....	5
McHenry County.....	17	Noble County.....	3
McKenzie County.....	1	Ottawa County.....	1
Nelson County.....	2	Paulding County.....	4
Pembina County.....	4	Perry County.....	5
Ramsey County.....	4	Pickaway County.....	8
Ransom County.....	6	Pike County.....	7
Renville County.....	8	Portage County.....	5
Richland County.....	1	Preble County.....	2
Williams County.....	15	Putnam County.....	15
Total.....	91	Richland County.....	18
		Ross County.....	19
		Sandusky County—	
		Fremont.....	3
		Scioto County.....	37

TYPHOID FEVER—Continued.

State Reports for October, 1913—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Ohio—Continued.		Washington:	
Seneca County.....	4	Asotin County.....	4
Shelby County.....	4	Chelan County.....	2
Stark County.....	12	Clallam County.....	1
Summit County.....	17	Douglas County.....	3
Trumbull County.....	8	Garfield County.....	1
Tuscarawas County.....	9	King County—	
Union County.....	7	Seattle.....	31
Van Wert County.....	12	Kitsap County.....	2
Vinton County.....	4	Kittitas County.....	2
Warren County.....	6	Lincoln County.....	1
Washington County.....	10	Pierce County—	
Wayne County.....	2	Tacoma.....	5
Williams County.....	10	Skagit County.....	3
Wood County.....	2	Snohomish County.....	3
Wyandot County.....	2	Everett.....	2
Total.....	840	Spokane County.....	1
		Spokane.....	7
		Stevens County.....	1
		Walla Walla County.....	6
		Total.....	75
Vermont:			
Addison County.....	4		
Bennington County.....	3		
Franklin County.....	6		
Grand Isle County.....	1		
Orange County.....	1		
Orleans County.....	1		
Rutland County.....	12		
Windham County.....	3		
Total.....	31		

Oregon Report for September, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Oregon:		Oregon—Con.	
Clackamas County.....	13	Marion County.....	3
Douglas County.....	2	Multnomah County.....	11
Jackson County.....	2	Umatilla County.....	5
Josephine County.....	1	Wasco County.....	4
Klamath County.....	3	Total.....	53
Lane County.....	3		
Linn County.....	6		

City Reports for Week Ended Nov. 8, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.....	1		Cleveland, Ohio.....	9	1
Auburn, N. Y.....	1		Coffeyville, Kans.....	1	
Aurora, Ill.....	2		Columbus, Ind.....	1	
Baltimore, Md.....	15		Columbus, Ohio.....	7	
Boston, Mass.....	12	2	Cumberland, Md.....	13	
Bridgeport, Conn.....	1		Dayton, Ohio.....	2	
Brockton, Mass.....	1		Dunkirk, N. Y.....	1	
Brookline, Mass.....	1		East Orange, N. J.....	1	
Cambridge, Ohio.....	2		Elmira, N. Y.....	2	
Camden, N. J.....	1		Erie, Pa.....	7	
Chelsea, Mass.....	3		Evansville, Ind.....	2	1
Chicago, Ill.....	86	6	Fall River, Mass.....	5	
Cincinnati, Ohio.....	7		Galesburg, Ill.....		1

TYPHOID FEVER—Continued.

City Reports for Week Ended Nov. 8, 1913—Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Grand Rapids, Mich.	6	1	Philadelphia, Pa.	42	5
Harrisburg, Pa.	1	1	Pittsburgh, Pa.	5	3
Hartford, Conn.	1	1	Plainfield, N. J.	1	1
Haverhill, Mass.	2	1	Providence, R. I.	5	1
Jersey City, N. J.	1	1	Reading, Pa.	11	1
Johnstown, Pa.	1	1	Richmond, Va.	2	1
Kalamazoo, Mich.	1	1	Roanoke, Va.	1	1
Kansas City, Kans.	4	1	St. Joseph, Mo.	1	1
Lawrence, Mass.	1	1	St. Louis, Mo.	17	3
Lexington, Ky.	4	1	Saginaw, Mich.	1	1
Little Rock, Ark.	5	1	San Diego, Cal.	1	1
Los Angeles, Cal.	11	2	Schenectady, N. Y.	2	1
Lowell, Mass.	3	1	South Bethlehem, Pa.	5	1
Lynchburg, Va.	1	1	Spokane, Wash.	1	1
Lynn, Mass.	1	1	Springfield, Ill.	3	1
Milwaukee, Wis.	6	1	Taunton, Mass.	1	1
Mount Vernon, N. Y.	1	1	Toledo, Ohio	6	2
Morristown, N. J.	3	1	Trenton, N. J.	4	1
Nanticoke, Pa.	1	1	Waltham, Mass.	1	1
Nashville, Tenn.	2	1	Washington, D. C.	9	1
Newark, N. J.	7	2	West Hoboken, N. J.	1	1
New Bedford, Mass.	1	1	Wilkes-Barre, Pa.	1	1
New Castle, Pa.	1	1	Wilkesburg, Pa.	1	1
New Orleans, La.	12	1	Worcester, Mass.	1	1
Newton, Mass.	1	1	York, Pa.	5	1
Norristown, Pa.	4	1	Zanesville, Ohio.	2	1
Oakland, Cal.	2	1			

CEREBROSPINAL MENINGITIS.

State Reports for October, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California:		Massachusetts—Continued.	
Alameda County—		Essex County—	
Oakland.....	1	Lawrence.....	2
Los Angeles County.....	1	Middlesex County—	
San Francisco County—		Cambridge.....	1
San Francisco.....	2	Wayland.....	1
Monterey County.....	1	Suffolk County—	
Stanislaus County—		Boston.....	5
Turlock.....	1	Total.....	11
Yolo County—			
Winters.....	1	North Dakota:	
Total.....	7	Cass County.....	3
Indiana:		Ohio:	
Allen County.....	1	Belmont County—	
Cass County.....	1	Bellaire.....	2
Martin County.....	1	Carroll County.....	1
Total.....	3	Cuyahoga County—	
Iowa:		Cleveland.....	3
Butler County.....	1	Franklin County—	
Carroll County.....	6	Columbus.....	2
Total.....	7	Gallia County.....	1
Maryland (exclusive of Baltimore City):		Hamilton County—	
Allegany County—		Cincinnati.....	2
Gilmore.....	1	Marion County—	
Washington County—		Marion.....	1
Smithsburg.....	1	Miami County.....	1
Total.....	2	Montgomery County—	
Massachusetts:		Dayton.....	1
Berkshire County—		Ross County.....	1
Pittsfield.....	1	Wyandot County.....	1
Bristol County—		Total.....	16
Taunton.....	1	Washington:	
		Kittitas County.....	3

CEREBROSPINAL MENINGITIS—Continued.**City Reports for Week Ended Nov. 8, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Chicago, Ill.....		1	Milwaukee, Wis.....	1	1
Cleveland, Ohio.....	1	1	Oakland, Cal.....	1	1
Haverhill, Mass.....	1	1	St. Louis, Mo.....	1	1
Lowell, Mass.....		1			

POLIOMYELITIS (INFANTILE PARALYSIS).**State Reports for October, 1913.**

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California:		Massachusetts—Continued.	
Alameda County—		Middlesex County—	
Alameda.....	1	Cambridge.....	2
Oakland.....	1	Frammingham.....	3
Humboldt County—		Lowell.....	1
Eureka.....	8	Malden.....	3
Los Angeles County—		Medford.....	2
Los Angeles.....	4	Melrose.....	1
Pasadena.....	1	Newton.....	1
Riverside County—		Somerville.....	1
Riverside.....	1	Wakefield.....	5
Sacramento County—		Waltham.....	8
Sacramento.....	1	Norfolk County—	
San Bernardino County—		Brookline.....	3
Colton.....	2	Quincy.....	1
Total.....	19	Plymouth County—	
Indiana:		Brockton.....	2
Allen County.....	1	Suffolk County—	
Daviess County.....	1	Boston.....	7
Huntington County.....	2	Chelsea.....	1
Lawrence County.....	1	Revere.....	2
Marion County.....	4	Worcester County—	
Montgomery County.....	3	Athol.....	1
St. Joseph County.....	1	Fitchburg.....	1
Tippecanoe County.....	1	Worcester.....	9
Total.....	14	Total.....	88
Iowa:		Michigan:	
Ida County.....	1	Ingham County—	
Maryland (exclusive of Baltimore City):		Lansing.....	1
Garrett County—		Lapeer County—	
Oakland R. F. D.....	1	Burnside Township.....	1
Massachusetts:		Washtenaw County—	
Berkshire County—		Ann Arbor.....	1
Pittsfield.....	1	Total.....	3
Bristol County—		Minnesota:	
Fall River.....	2	Chippewa County—	
New Bedford.....	4	Montevideo.....	1
Essex County—		Lac Qui Parle County—	
Amesbury.....	1	Lake Shore Township.....	1
Beverly.....	5	Nobles County—	
Haverhill.....	6	Worthington.....	1
Lawrence.....	4	Ramsey County—	
Lynn.....	1	West St. Paul.....	1
Methuen.....	1	Total.....	4
Nahant.....	1	North Dakota:	
Newburyport.....	1	Cass County.....	2
Peabody.....	1	Ohio:	
Swampscott.....	1	Cuyahoga County—	
Hampden County—		Cleveland.....	3
Ludlow.....	1	Fairfield County.....	1
Palmer.....	1		
Springfield.....	3		

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.**State Reports for October, 1913—Continued.**

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Ohio—Continued.		Virginia—Continued.	
Franklin County—		Buchanan County.....	1
Columbus.....	1	Caroline County.....	1
Hamilton County—		Chesterfield County.....	2
Cincinnati.....	1	Dickenson County.....	1
Miami County.....	1	Floyd County.....	1
Stark County.....	1	Frederick County.....	1
Total.....	8	Lee County.....	1
		Lunenburg County.....	2
Vermont:		Nansemond County.....	2
Caledonia County.....	1	Norfolk County.....	1
Orange County.....	1	Northumberland County.....	2
Orleans County.....	3	Nottoway County.....	1
Essex County.....	1	Orange County.....	1
Total.....	6	Prince Edward County.....	1
		Total.....	20
Virginia:		Washington:	
Alleghany County.....	1	King County—	
Augusta County.....	1	Seattle.....	1

Oregon Report for September, 1913.

Oregon:		
Multnomah County.....	1	

City Reports for Week Ended Nov. 8, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich.....	1		La Crosse, Wis.....	1	
Boston, Mass.....	1	1	Los Angeles, Cal.....	1	
Brockton, Mass.....	1	1	Malden, Mass.....	2	
Cambridge, Ohio.....	1		Manchester, N. H.....	4	2
Cleveland, Ohio.....	2		Newton, Mass.....	1	
Everett, Mass.....	1		Philadelphia, Pa.....		1
Hartford, Conn.....	1		Worcester, Mass.....	2	

ERYSIPELAS.**City Reports for Week Ended Nov. 8, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Brockton, Mass.....	1		Montclair, N. J.....	1	
Chicago, Ill.....	5	2	Mount Vernon, N. Y.....	1	
Cincinnati, Ohio.....	5		Philadelphia, Pa.....	6	1
Cleveland, Ohio.....	5	1	Pittsburgh, Pa.....	5	
Erie, Pa.....	1		Sacramento, Cal.....	2	
Hartford, Conn.....	1		St. Louis, Mo.....	5	
Lancaster, Pa.....	1		South Bethlehem, Pa.....	1	
Los Angeles, Cal.....	2		Wilkes-Barre, Pa.....	1	
Milwaukee, Wis.....	6				

LEPROSY.**California—Los Angeles.**

Senior Surg. Brooks, of the Public Health Service, reported November 19, 1913, that 2 new cases of leprosy had been notified in Los Angeles, Cal., one being in an Italian woman, age 32 years, married, 3 children in family in good health; symptoms of the disease having been present for five years. The other case was in a Mexican, aged 30 years, married, wife and children in good health; the first symptoms of the disease were noticed four months ago. The diagnosis in each case had been verified bacteriologically.

PELLAGRA.

During the week ended November 8, 1913, pellagra was notified by cities as follows: Los Angeles, Cal., 1 death; Nashville, Tenn., 1 death; New Orleans, La., 3 deaths; Philadelphia, Pa., 1 case.

PLAGUE.**Rats Collected and Examined.**

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Oakland.....	Nov. 1, 1913	49	717	574	.....
Berkeley.....	do.....	4	230	181	.....
San Francisco.....	do.....	11	1,930	1,580	.....

California—Squirrels Collected and Examined.

During the week ended November 1, 1913, ground squirrels were examined for plague infection, as follows: Alameda County, 41; Contra Costa County, 5; San Mateo County, 29; city of San Francisco, 1. No plague-infected squirrel was found.

PNEUMONIA.**City Reports for Week Ended Nov. 8, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Auburn, N. Y.....	3	2	Manchester, N. H.....	2	2
Binghamton, N. Y.....	7	8	New Castle, Pa.....	2	.....
Chicago, Ill.....	102	70	Newport, Ky.....	2	2
Cleveland, Ohio.....	15	8	Philadelphia, Pa.....	27	38
Dunkirk, N. Y.....	4	.....	Pittsburgh, Pa.....	25	36
Erie, Pa.....	1	.....	Rutland, Vt.....	1	1
Lancaster, Pa.....	1	.....	Schenectady, N. Y.....	3	5
Los Angeles, Cal.....	12	5	York, Pa.....	1	.....

RABIES.**California—Oakland—Rabies in Animals.**

Surg. Long, of the Public Health Service, reported by telegraph that during the week ended November 22, 1913, 3 cases of rabies in dogs had been reported in Oakland, Cal.

TETANUS.

During the week ended November 8, 1913, tetanus was notified by cities, as follows: Chicago, Ill., 1 case; Dayton, Ohio, 1 death; Trenton, N. J., 1 death (congenital).

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.**State Reports for October, 1913.**

	Scarlet fever.	Measles.	Diphtheria.
California.....	244	42	199
Hawaii.....	2	2	6
Indiana.....	483	62	727
Iowa.....	66	.....	83
Maryland, exclusive of Baltimore City.....	130	18	192
Massachusetts.....	503	333	642
Michigan.....	217	431	533
Minnesota.....	190	85	354
New Jersey.....	245	.....	703
North Dakota.....	17	44	11
Ohio.....	978	576	2,137
South Carolina.....	18	62	54
Vermont.....	16	39	25
Washington.....	57	83	22
Wisconsin.....	167	237	277

Oregon Report for September, 1913.

Oregon.....	33	12	17
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City Reports for Week Ended Nov. 8, 1913.

Cities.	Population, United States census, 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.....	558,485	160	70	4	2	.....	30	1	13	12
Boston, Mass.....	670,585	194	39	3	14	.....	42	5	64	19
Chicago, Ill.....	2,185,283	583	181	20	15	1	81	5	79	62
Cleveland, Ohio.....	560,663	140	103	9	24	.....	28	2	23	11
Philadelphia, Pa.....	1,549,008	460	78	7	10	1	60	9	68	40
Pittsburgh, Pa.....	533,905	195	45	5	11	1	58	5	24	17
St. Louis, Mo.....	687,029	205	66	4	7	.....	21	.....	42	15
From 300,000 to 500,000 inhabitants:										
Cincinnati, Ohio.....	364,463	118	22	3	.....	.....	13	1	26	25
Los Angeles, Cal.....	319,198	97	10	.....	3	.....	13	.....	49	16
Milwaukee, Wis.....	373,857	100	22	6	13	1	16	1	23	9
Newark, N. J.....	347,469	74	37	.....	34	.....	20	.....	37	8
New Orleans, La.....	339,075	197	32	5	5	.....	3	.....	37	22
Washington, D. C.....	331,069	111	25	.....	1	.....	7	.....	27	7

SCARLET FEVER, MEASLES, DIPHThERIA, AND TUBERCULOSIS—Contd.

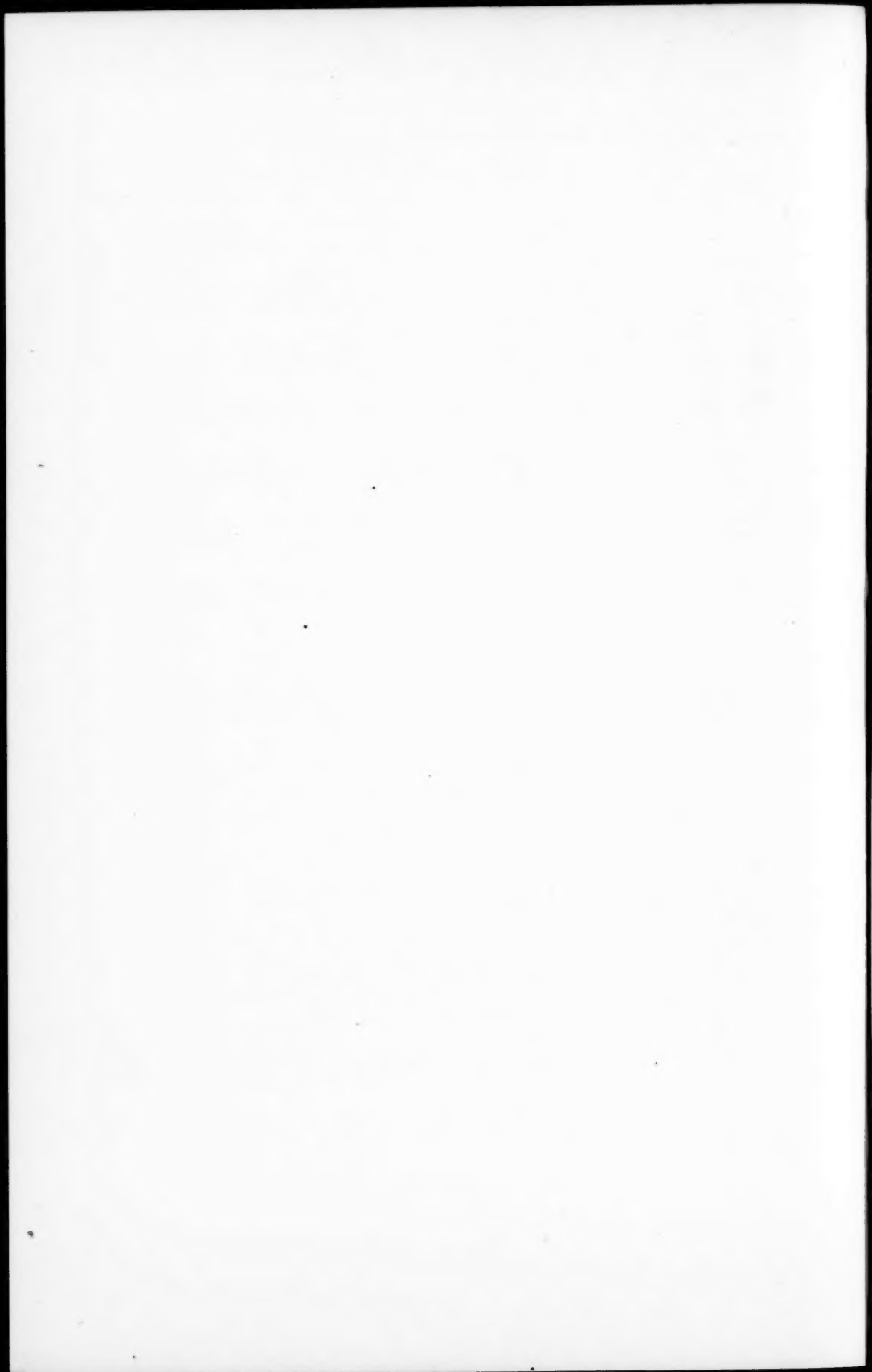
City Reports for Week Ended Nov. 8, 1913—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 200,000 to 300,000 inhabit- ants:										
Jersey City, N. J.	267,779									5
Providence, R. I.	224,326	68	29	3	6		7		5	7
From 100,000 to 200,000 inhabit- ants:										
Bridgeport, Conn.	102,054	28	7		4		2		2	1
Columbus, Ohio	181,548	58	25		4		6		1	8
Dayton, Ohio	116,577	45	39	3	7		5			1
Fall River, Mass.	119,295		4	1	3		6		6	2
Grand Rapids, Mich.	112,571	23	12	3	83		13		2	
Lowell, Mass.	106,294	25	10	1	3		1		4	5
Nashville, Tenn.	110,364	32	1				12		2	2
Oakland, Cal.	150,174	45					2	1	2	2
Richmond, Va.	127,628	54	7				6	1	8	5
Spokane, Wash.	104,402		2							4
Toledo, Ohio	168,497	65	10	3			7			10
Worcester, Mass.	145,986	44	9		8		4		6	4
From 50,000 to 100,000 inhabit- ants:										
Altoona, Pa.	52,127	11	1				3		1	1
Bayonne, N. J.	55,545	16	7		2		1		5	1
Brockton, Mass.	56,878	14	10	1			1		3	1
Camden, N. J.	94,538		5						3	
Erie, Pa.	66,525	25	16				5		1	
Evansville, Ind.	69,647	23	7		2		1			2
Harrisburg, Pa.	64,186	18	13				1		2	2
Hartford, Conn.	98,915	42	15		1		6			2
Hoboken, N. J.	70,324		2		4		1		8	1
Johnstown, Pa.	70,063	18	20				2			1
Kansas City, Kans.	82,331		4				4		2	
Lawrence, Mass.	85,892		6				1		3	1
Lynn, Mass.	89,336	20	5	1					3	2
Manchester, N. H.	70,063	16	3				2			
New Bedford, Mass.	96,652		1	1	2		6		9	4
Passaic, N. J.	54,773	12	5		1		2		2	
Pawtucket, R. I.	51,622		2							1
Reading, Pa.	96,071	36	21	1	3		3		1	1
Saginaw, Mich.	50,510	16	3							
St. Joseph, Mo.	77,403	44	4		1		1		3	5
Schenectady, N. Y.	72,826	25	4		1		2	1	1	3
South Bend, Ind.	53,684	22	7	2			4			2
Springfield, Ill.	51,678	19	1						3	1
Springfield, Mass.	88,926	16	8		2		3		7	4
Trenton, N. J.	96,815	45	1				5			
Wilkes-Barre, Pa.	67,105	26	9	2	1		4		4	
Yonkers, N. Y.	79,803	24	13	2	30		4		4	
From 25,000 to 50,000 inhabitants:										
Atlantic City, N. J.	46,150		2						2	
Auburn, N. Y.	34,668	9	2				2		1	2
Aurora, Ill.	29,807	8	1							
Austin, Tex.	29,860	14								1
Binghamton, N. Y.	48,443	18	1		2		2		5	1
Brookline, Mass.	27,792	7	4				1		2	1
Chelsea, Mass.	32,452	13	2		2					
Chicopee, Mass.	25,401	7	1	1			1		1	
Danville, Ill.	27,871	19	4	1	1		1			
East Orange, N. J.	34,371		5	1	18		1		1	
Elmira, N. Y.	37,176	9	3				4			1
Everett, Mass.	33,484	11	2				4			
Fitchburg, Mass.	37,826	6	4				3		1	
Haverhill, Mass.	44,115	11	2	1	1		1		2	
Kalamazoo, Mich.	39,437	16							4	1
La Crosse, Wis.	30,417	7	3				2		2	
Lancaster, Pa.	47,227		1		1		1		1	
Lexington, Ky.	35,099	13	1		1		2			1
Little Rock, Ark.	45,941		3							
Lynchburg, Va.	29,494	9	4	1			1		2	
Malden, Mass.	44,404	10	7		1		2		1	3
Mount Vernon, N. Y.	30,919								1	
New Castle, Pa.	36,280		2	2	1		2		3	
Newport, Ky.	30,309	12	4	1					2	2
Newton, Mass.	39,806	11			1				1	
Niagara Falls, N. Y.	30,445	13	1				2	1		1

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Nov. 8, 1913—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued.										
Norristown, Pa.	27,875	4	1							
Pasadena, Cal.	30,291	7							7	
Pittsfield, Mass.	32,121	12	1				2	1		
Portsmouth, Va.	33,190	19	4	1			1			
Racine, Wis.	38,002	7	5				6			
Roanoke, Va.	34,874	8	4		2		1		12	
Sacramento, Cal.	44,696	17			1		3			
San Diego, Cal.	39,578		5		1				1	
South Omaha, Nebr.	26,259	5	1							
Superior, Wis.	40,384	7					2		3	
Taunton, Mass.	34,259	11	1				3		1	2
Waltham, Mass.	27,834	8	1							
West Hoboken, N. J.	35,403		5						3	
Wheeling, W. Va.	41,641	7	6				2		1	
York, Pa.	44,750		2							
Zanesville, Ohio.	28,026		5				1			
Less than 25,000 inhabitants:										
Alameda, Cal.	23,383	9								
Ann Arbor, Mich.	14,817	11	6						2	
Beaver Falls, Pa.	12,191		1				1		6	
Bennington, Vt.	8,698	5								
Biddeford, Me.	17,079	8	2							
Braddock, Pa.	19,357		1				3			
Cambridge, Ohio.	11,327	1	1				3			
Clinton, Mass.	13,075	3							1	
Coffeyville, Kans.	12,687		1				1			
Columbus, Ind.	8,813	3	2		2		1			
Concord, N. H.	21,497	15	2							
Cumberland, Md.	21,839	9	3	1	1		3		4	1
Dunkirk, N. Y.	17,221	4			47					
Galesburg, Ill.	22,089	16	1							3
Harrison, N. J.	14,498	3							1	
Kearny, N. J.	18,659	6	1		7		3			
La Fayette, Ind.	20,081	6	6				1			1
Marinette, Wis.	14,610	2								
Massillon, Ohio	13,879		1							
Medford, Mass.	23,150	3			1		2			1
Melrose, Mass.	15,715	2	1				2			
Moline, Ill.	24,199	5								
Montclair, N. J.	21,550	8								
Morristown, N. J.	12,507	2	2		1		1		1	1
Nanticoke, Pa.	18,877	5	2		2					
Newburyport, Mass.	14,949	9		1			1		2	
North Adams, Mass.	22,019	3	1				1			1
Northampton, Mass.	19,431	3					1		2	
Palmer, Mass.	8,610	4								
Plainfield, N. J.	20,550	3							7	
Pottstown, Pa.	15,599	11								1
Rutland, Vt.	13,546	7					2			
Saratoga Springs, N. Y.	12,693	6							1	1
South Bethlehem, Pa.	19,973	11	1				2			
Steelton, Pa.	14,246	1			1				2	
Wilksburg, Pa.	18,924	6	5				3		1	



FOREIGN REPORTS.

CANADA.

Precautions Against Infection of Vessels—British Columbia.

The following statement, dated November 11, 1913, was received from Vice Consul General Woodward, at Vancouver:

Upon request of Surg. B. J. Lloyd, of the United States Public Health Service, stationed at Seattle, the provincial health officer at Vancouver is cooperating in the fumigation of vessels to prevent the spread of plague infection to the Pacific coast cities by means of rats. The work of fumigation is being carried out at Victoria and Williamshead. All vessels are required to anchor at a distance of 6 feet from the wharves and all cables are protected by rat guards.

CEYLON.

Cholera—Colombo.

During the week ended October 20, 1913, 32 cases of cholera with 22 deaths were notified in Colombo, making a total from the beginning of the outbreak, which occurred in the last week in September, 1913, of 41 cases with 30 deaths.

JAPAN.

Examination of Rats—Plague-Infected Rats—Yokohama.

During the period from July 1 to October 27, 1913, 201,395 rats were examined at Yokohama. Of this number 31 were found to be infected with plague. Rat traps and poisons are being used throughout the city, and compulsory cleaning of buildings and premises is enforced. Deratization is carried out on all lighters and in the freight godowns.

MEXICO.

Yellow Fever—Puerto Mexico, V. C.

It was reported November 12, 1913, that there had been 3 cases of illness in Puerto Mexico, which were probably yellow fever. All 3 cases originated in the city. Two were in Americans, one a resident of two months, the other of less than a year. The third case was a Mexican, a child five years of age.

On November 17 the occurrence of two cases of yellow fever in Puerto Mexico was reported. Both cases were in one house and were in Mexicans, man and wife. It is also reported that there have

been many cases of sickness resembling yellow fever and among them a number of fatalities after a comparatively short illness.

For the purposes of maritime quarantine Puerto Mexico should be classed as an infected port.

ROUMANIA.

Status of Cholera.

During the period from October 23 to 29, 1913, 22 cases of cholera and 28 deaths from the disease were notified in Roumania, making a total from the outbreak to date of 5,656 cases with 2,908 deaths. On October 29, 1913, 90 cases remained under treatment.

RUSSIA.

Status of Cholera.

Cholera has been notified in Russia as follows: Week ended October 11, 1913, 23 cases with 5 deaths; week ended October 18, 1913, 12 cases with 2 deaths. The cases occurred in the Governments of Bessarabia, Ekaterinislav, Kherson, and Taurida.

SERVIA.

Status of Cholera.

During the week ended October 18, 1913, 138 cases of cholera with 52 deaths were notified in Servia, 170 cases remaining under treatment October 18, 1913.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Nov. 28, 1913.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Bosnia-Herzegovina—				
Bijela.....	Oct. 8-13.....	4		
Bojanic.....	do.....	1		
Gracanica.....	do.....	1		
Kostajnica.....	do.....	1		
Ceylon:				
Colombo.....	Sept. 30-Oct. 21...	41	30	
India:				
Negapatam.....	Sept. 14-27.....		29	
Roumania.....				Total, Aug. 1-Oct. 29: Cases, 5,626; deaths, 2,908.
Russia:				
Bessarabia—				
Ishmall.....	Oct. 5-11.....	8	3	
Reni.....	Oct. 5-18.....	1		
Ekaterinislav—				
Ekaterinislav district.....	do.....	5		
Nicopol.....	Oct. 5-11.....	1		
Kherson—				
Kherson district.....	Oct. 5-18.....	7	1	
Kherson.....	do.....	1	1	
Odessa district.....	do.....	10		
Odessa.....	do.....	2	2	
Taurida—				
District of the Dneiper.....	Oct. 12-18.....		1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Nov. 28, 1913—Continued.****CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Servia.....	Total, Oct. 1-18: Cases, 138; deaths, 52.
Siam: Bangkok.....	Sept. 7-Oct. 4.....	2	

YELLOW FEVER.

Mexico: Puerto Mexico, V. C.....	Nov. 17.....	2	
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PLAGUE.

Egypt:				
Alexandria.....	Sept. 29-Oct. 3....	2	1	
Port Said.....	Oct. 15.....	1	
Provinces—				
Assiout.....	Oct. 11-30.....	1	1	
Fayoum.....	Oct. 11.....	1	1	
Garbieh.....	Oct. 15-28.....	8	2	
India:				
Karachi.....	Oct. 5-11.....	7	6	
Siam:				
Bangkok.....	Sept. 7-Oct. 4.....	.....	3	

SMALLPOX.

Arabia:				
Aden.....	Oct. 14-20.....	1	1	
Austria-Hungary:				
Tyrol.....	Oct. 12-18.....	1	.....
Canada:				
Montreal.....	Nov. 2-15.....	13	.....
China:				
Shanghai.....	Oct. 6-19.....	.....	2	
Egypt:				
Cairo.....	Oct. 15-21.....	4	4	
Port Said.....	Oct. 15-28.....	10	3	
India:				
Bombay.....	Oct. 5-11.....	1	.....
Mexico:				
Chihuahua.....	Oct. 21-Nov. 2....	.....	4	
Veracruz.....	Nov. 3-9.....	.....	2	
Turkey in Europe:				
Constantinople.....	Oct. 12-Nov. 1....	.....	7	
Saloniki.....	Oct. 13-26.....	.....	16	

Reports Received from June 28 to Nov. 21, 1913.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Hodeidah.....	Aug. 27-Sept. 4...	3	2	Among the military at quaran- tine.
Do.....	Aug. 20-Sept. 4...	123	21	
Austria-Hungary:				
Bosnia-Herzegovina—				
Bijela.....	Aug. 16-27.....	3	.....
Boljanic.....	Sept. 30-Oct. 7....	1	.....
Bosnisch Samac.....	Aug. 16-Sept. 15..	7	1	
Brad.....	Sept. 30-Oct. 7....	1	.....
Brecko.....	Aug. 1-Sept. 29....	34	7	
Brezovopolje.....	Sept. 1-30.....	1	.....
Buskinje.....	Aug. 1.....	1	.....

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to Nov. 21, 1913—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Bosnia-Herzegovina—Con.				
Creveno Brodo.....	Aug. 28-Sept. 6....	.....	.....
Donja Skukva.....	Aug. 16-27.....	1	1	
Golovac.....	Sept. 1-30.....	1	.....
Gornja Tuzla.....	Aug. 1-Sept. 7....	6	1	
Gracamea.....	Aug. 16-27.....	1	.....
Gracanica.....	Sept. 30-Oct. 7....	5	.....
Janja.....	Aug. 28-Sept. 29..	5	.....
Kostajnica.....	Sept. 30-Oct. 7....	1	.....
Labuca.....	do.....	1	.....
Ljubaca.....	Aug. 28-Sept. 6....	1	.....
Morac.....	do.....	2	.....
Orasje.....	Aug. 16-Sept. 29..	18	1	
Tuzla.....	Aug. 28-Sept. 29..	2	.....
Uljice.....	Aug. 16-26.....	1	.....
Vidovice.....	Aug. 16-Sept. 29..	9	.....
Vusic Doinji.....	Aug. 16-Sept. 7....	3	.....
Vusic Gornji.....	Aug. 16-Sept. 15..	4	.....
Croatia-Slavonia—				
Pozenga—				
Brod.....	Sept. 29-Oct. 5....	4	.....
Davor.....	do.....	2	.....
Jasenovac.....	Sept. 22-Oct. 5....	2	2	
Novska.....	Sept. 22-28.....	1	1	
Syrmien—				
Adasevci.....	Sept. 8-Oct. 5....	12	7	
Alt Slankamen.....	Aug. 16.....	2	.....
Bacinci.....	Sept. 8-14.....	5	3	
Bebrina.....	Sept. 1-7.....	1	1	
Beska.....	Sept. 14-28.....	2	.....
Bosnjaci, Mitrovica district.....	do.....	1	.....
Bosnjaci, Zupenja district.....	Aug. 16-Sept. 28..	39	13	
Bosut.....	Aug. 25-Sept. 28..	4	2	
Cerna.....	Sept. 22-Oct. 5....	9	.....
Cortanovec.....	Aug. 25-Sept. 28..	6	3	
Djakova.....	Aug. 25-Sept. 2....	1	.....
Drenovec.....	Sept. 14-28.....	6	2	
Galubinci.....	Sept. 8-Oct. 5....	18	6	
Grad, Mitrovica district.....	Sept. 1-14.....	2	1	
Grad, Zemum district.....	Sept. 8-14.....	1	1	
Ilinci.....	Aug. 25-Oct. 5....	2	.....
Klenac.....	Sept. 29-Oct. 4....	2	2	
Kreevna.....	July 31.....	5	3	
Kupinovo.....	Aug. 17-Sept. 22..	2	1	
Kutina.....	Aug. 25-Sept. 2....	1	.....
Kuzmin.....	Sept. 1-Oct. 5....	142	45	
Lacarak.....	Aug. 25-Oct. 5....	13	1	
Martinci.....	Aug. 16-Oct. 5....	19	13	
Micanovici.....	Sept. 29-Oct. 5....	2	.....
Mitrovica.....	July 15-Sept. 28..	10	5	
Morovic.....	Sept. 14-28.....	5	1	
Novo Karlovec.....	Aug. 25-Oct. 5....	30	18	
Novo Slankamen.....	Sept. 8-14.....	1	1	
Ogar, Ruma district.....	do.....	2	1	
Ogar, Sid district.....	Sept. 8-Oct. 5....	17	5	
Osiek.....	Sept. 22-28.....	3	1	
Otok.....	Sept. 1-7.....	2	1	
Podgajci.....	Aug. 16-Sept. 14..	3	2	
Raca.....	Sept. 22-28.....	1	1	
Rivica.....	Sept. 8-14.....	2	2	
Serlin.....	Aug. 25-Sept. 22..	2	2	
Sid.....	Sept. 29-Oct. 5....	1	.....
Siskovec.....	Sept. 22-Oct. 5....	4	2	
Tovarnik.....	Sept. 14-28.....	3	2	
Vinkovec.....	Sept. 8-14.....	1	1	
Vojka.....	Sept. 14-22.....	1	.....
Vukovar Argoviste.....	do.....	1	1	
Zupinge.....	Sept. 22-25.....	.....	.....	Present.
Crownland—				
Bohemia—				
Marienbad.....	Sept. 13.....	1	.....
Weimberge.....	Sept. 27.....	1	1	
Dalmatia—				
Cattaro.....	Aug. 6.....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Nov. 21, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Crownland—Continued.				
Galicia—				
Skole—				
Oporzec.....	Sept. 10-Oct. 6....	15	9	
Slawsko.....	do.....	1		
Tuchla.....	Sept. 18-Oct. 6....	2		
Tucholka.....	Sept. 10-Oct. 6....	2	1	
Wyzlow.....	do.....	1	1	
Lower Austria—				
Vienna.....	Aug. 4.....	1		
Hungary—				
Bacs-Bodrog—				
Ada.....	Sept. 7-13.....	2		
Apatin.....	Sept. 29-Oct. 4....	3		
Bacs.....	Sept. 14-27.....	3		
Csurog.....	Sept. 2-Oct. 4.....	20	2	
Kolpeny.....	Sept. 14-Oct. 4....	2		
Petroz.....	Sept. 7-20.....	2	1	
Obecse.....	Sept. 7-Oct. 4.....			
Szenttamás.....	Sept. 14-Oct. 4....	31		
Temerin.....	do.....	2		
Bereg—				
Alsóverezske.....	Sept. 21-27.....	1		
Borhalom.....	do.....	2		
Csetfalva.....	Oct. 4.....	1		
Felsőverezske.....	Sept. 7-27.....	7		
Harsfalva.....	do.....	2		
Kanora.....	Sept. 14-20.....	4		
Kissana.....	Sept. 21-27.....	7		
Kissolyva.....	Sept. 7-13.....	2		
Munkács.....	do.....	1		
Nagykucska.....	Sept. 21-28.....	1		
Odavidhaza.....	Sept. 7-13.....	3		
Orosztelek.....	Sept. 7-28.....	4		
Proszueg.....	Sept. 14-20.....	3		
Rakocziszallas.....	Sept. 14-28.....	9		
Szarvoskut.....	Sept. 21-28.....	4		
Szentomiklos.....	Sept. 14-28.....	13		
Szolyva.....	Sept. 21-28.....	6		
Tarpa.....	Sept. 21-Oct. 4....	4		
Ujdavidhaza.....	Sept. 14-28.....	5		
Varkulesa.....	Sept. 7-Oct. 11....	5		
Varpalanka.....	Sept. 21-28.....	3		
Vezerszallas.....	do.....	1		
Voloscz.....	Sept. 7-Oct. 4.....	2		
Zajago.....	Sept. 7-13.....	1		
Zsilib.....	Sept. 21-Oct. 11....	6		
Zugo.....	Sept. 7-Oct. 11....	6		
Borsod—				
Sajolad.....	Sept. 28-Oct. 11....	22		
Budapest—				
Budapest.....	Sept. 13-Oct. 4....			
Fejer—				
Adony.....	Oct. 4.....	1		
Pazmand.....	Sept. 21-28.....	1		
Heves—				
Ludas.....	Oct. 5-11.....	1		
Poroszló.....	do.....	1		
Jász-Nagykun-Szolnok—				
Tiszaroff.....	do.....	2		
Kolozs—				
Kolozsvár, Klausenburg.....	Sept. 21-Oct. 11....	17		
Komarom, Komorn.....	Sept. 29-Oct. 4....	1		
Mezőszopor.....	Oct. 4.....	2		
Pancsova.....	Sept. 29-Oct. 4....	1		
Krassó-Söreny—				
Bozovics.....	Sept. 14-Oct. 11....	6		
Dalbósfalva.....	Oct. 5-11.....	5		
Illyed.....	Sept. 21-Oct. 4....	7		
Jam.....	do.....	7		
Nagylaposnok.....	Sept. 14-Oct. 4....	23		
Neramezo.....	Sept. 21-Oct. 11....	4		
Neramegyoros.....	Sept. 7-14.....	18		
Stajerlak-anina.....	Sept. 21-28.....	1		
Szakalar.....	Sept. 14-Oct. 4....	21		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to Nov. 21, 1913—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Hungary—Continued.				
Pest-Pilis—				
Erzsebetfalva.....	Sept. 21-28.....	1	.....
Fajsz.....	Oct. 5-11.....	1	.....
Hidegkut.....	Sept. 21-28.....	2	.....
Raczkeve.....	do.....	2	.....
Do.....	do.....	1	.....
Tokol.....	do.....	1	.....
Pozenoy, Pressburg—				
Kismagyar.....	Oct. 5-11.....	1	.....
Szatmar—				
Tiszabecs.....	Oct. 4.....	3	.....
Temes—				
Deliblat.....	Sept. 1-Oct. 4.....	31	.....
Homokos.....	Oct. 4.....	3	.....
Kevevera.....	Aug. 16-Sept. 20.....	8	3	
Palank.....	Aug. 10-Oct. 4.....	16	1	
Temesvalalza.....	Oct. 5-11.....	7	.....
Torontal—				
Csenta.....	Oct. 11.....	6	.....
Melenze.....	Sept. 14-20.....	2	.....
Nagybecskerek.....	Sept. 21-28.....	1	.....
Kuman.....	Sept. 14-28.....	8	.....
Ung—				
Csap.....	Sept. 14-Oct. 4.....	6	.....
Kisteglas.....	Sept. 21-28.....	1	.....
Lehocz.....	do.....	1	.....
Nagyrat.....	do.....	3	.....
Palocz Ujvaros.....	Oct. 5-11.....	1	.....
Titel.....	Sept. 17-27.....	1	.....
Unglovasad.....	Oct. 5-11.....	2	.....
Zala—				
Nagykanizsa.....	Oct. 11.....	6	.....
Radvanc.....	Sept. 14-20.....	1	.....
Zemplen—				
Satoraljanjhely.....	Sept. 21-28.....	1	.....
Bulgaria.....				
Rustschuk.....	Sept. 8.....	18	8	Sept. 10, present in the districts of Pleven, Sivistov, Vratza, and Widin.
Sistovo.....	do.....	60	.....
Tirnov.....	do.....	14	14	
Varna.....	Sept. 11.....	3	.....	Aug. 25, 3 deaths among returning soldiers.
Ceylon:				
Colombo.....	Aug. 17-23.....	1	1	
China:				
Amoy.....	Aug. 23.....			Present in vicinity; Oct. 4, present.
Canton.....	July 13-26.....	132	6	Present. Do.
Chuan Chow.....	Sept. 6.....			
Foochow.....	Sept. 13.....			
Hongkong.....	Aug. 3-Oct. 4.....	78	41	
Swatow.....	Aug. 1-31.....	31	30	
Dutch East Indies:				
Borneo.....				Total, May 12-June 7: Cases, 131; deaths, 105.
Sesajap, district.....	May 12-June 7.....	57	40	
Java—				
Batavia and Tanjong-Priok.....	May 18-Oct. 4.....	544	439	May 25-Oct. 4: 13 cases and 1 death among Europeans.
Madloen, Province.....	Apr. 22-28.....	1	4	
Pekalongan.....	Aug. 10-Sept. 20.....	110	76	
Preanger.....	Aug. 9-15.....	41	23	
Samarang.....	July 12-Aug. 16.....	18	11	
Surabaya.....	Aug. 2-23.....	2	.....
Sibiru.....	Mar. 24-Apr. 27.....	117	104	
Sumatra—				
Djambi, Province.....	June 1-Sept. 20.....	289	141	July 15-Aug. 17 not received.
Palembang.....	June 22-Aug. 4.....	252	157	
Greece:				
Athens.....	Sept. 15-29.....	1	1	Among troops at quarantine.
Piræus.....	Sept. 13-Oct. 13.....	9	5	
India:				
Bassein.....	May 4-July 19.....	31	23	Sept. 27, 1 case.
Bombay.....	May 25-Oct. 11.....	48	33	
Calcutta.....	Apr. 27-Sept. 27.....		523	
Madras.....	June 15-Oct. 4.....	16	10	
Moulmine.....	May 4-June 14.....	6	6	
Rangoon.....	May 1-Aug. 31.....	7	3	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued

Reports Received from June 28 to Nov. 21, 1913—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Indo-China.....				Total, Jan. 1-Sept. 10: Cases, 213. Deaths, Jan. 1-July 10: 145.
Saigon.....	June 17-23.....	2	2	
Japan:				
Kobe.....	Sept. 5-8.....	7		From s. s. Canada Maru. Crew quarantined at Wada.
Nagasaki.....	Aug. 25-31.....	2		From s. s. Canada Maru.
Philippine Islands:				
Manila.....	Aug. 25-Oct. 11...	32	17	
Cavite.....	Oct. 5.....	1		Sept. 28-Oct. 4: 1 fatal case on s. s. Cebu.
Mecauayan.....	Oct. 5-11.....	1		
Polo.....	Sept. 28-Oct. 4...	1		In Bulacan.
Roumania.....				Aug. 1-Oct. 22: Total, cases, 5,634; deaths, 2,880. Oct. 16-22: Cases, 160; deaths, 140.
Bucharest.....	Aug. 5-14.....	1	1	
Braila.....	To Sept. 2.....	43		Among the military.
Do.....	Sept. 3-8.....	4	3	Civilians.
Galatz.....	Aug. 22-Sept. 2...	34	6	
Kustanje.....	Sept. 3-12.....	8	1	
Silistria.....	To Aug. 25.....	26		
Stephanesti.....	Aug. 1-14.....	18	7	
Sulina.....	To Aug. 24.....	56		Including previous reports.
Turnu-Magurele.....	Aug. 5.....		1	Cases present.
Vilsoara-Teleorman.....	do.....	3		
Russia:				
Governments—				
Bessarabia—				
Akkerman.....	Sept. 16-18.....	3	1	
Ishmall.....	Sept. 16-Oct. 4...	26	11	
Kishinef.....	Sept. 22.....	3	1	
Wolfkaneshty.....	Sept. 18-21.....	1	1	
Ekaterinisla—				
Nicopol.....	Sept. 22-Oct. 4...	5		
Kherson.....				Total, Aug. 24-Oct. 4: Cases, 128; deaths, 61; including previous reports.
Elizabethgrade.....	Sept. 28-Oct. 4...	1	1	
Kherson, district.....	Aug. 26-Oct. 4...	42	27	
Kherson.....	do.....	51	14	
Odessa, district.....	Sept. 7-Oct. 4...	29	17	
Odessa.....	do.....	5	3	
Varvaroka.....	Sept. 22.....			Present.
Kiel—				
Zvenigorode.....	Sept. 8.....	2	2	
Minsk.....	Sept. 14-22.....	1	1	
Poltava.....	Sept. 18-Oct. 4...	25	5	
Taurida—				
Alechki.....	Sept. 8-Oct. 4...	5	1	
Dneiper district.....	Sept. 21-27.....	3	1	
Dneprovskl.....	Sept. 8-14.....	8	2	
Servia.....				Total, July 4-Oct. 11: Cases, 4,572; deaths, 1,844.
Districts—				
Belgrade.....	July 4-Sept. 27...	100	49	Sept. 22, 1 case.
Belgrade.....	July 4-Aug. 30...	262	98	
Kraina.....	Aug. 3-Sept. 27...	257	95	
Kragujevatz.....	July 4-Sept. 27...	281	94	
Kroushevatz.....	do.....	235	82	
Lajkovac.....	Aug. 1-7.....	1		
Morava.....	July 4-Sept. 27...	584	241	
Niche.....	do.....	327	114	
Oujitze.....	July 22-Sept. 27...	30	20	
Palanka.....	Aug. 1-7.....	1		
Piot.....	July 4-Sept. 27...	625	250	
Podrigne.....	do.....	106	48	
Pojarevatz.....	Aug. 3-Sept. 27...	441	237	
Pozenga.....	July 25-31.....	1		
Roudnik.....	Aug. 3-Sept. 27...	34	16	
Shabatz.....	Aug. 1-7.....	1		
Smederevo.....	July 4-Sept. 27...	200	78	
Tchatchak.....	July 22-Aug. 30...	45	7	
Timok.....	July 19-Sept. 27...	251	129	
Toplitza.....	July 22-Sept. 27...	45	20	
Ueskub.....	July 19-Aug. 2...	37	19	
Visnjica and Mirjevo...	July 4-21.....		1	
Waljevo.....	July 22-Sept. 27...	264	194	
Wagne.....	do.....	377	194	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Nov. 21, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Siam:				
Bangkok.....	Mar. 23-Sept. 6....	.....	18	
Straits Settlements:				
Singapore.....	July 6-Sept. 27....	18	17	
Turkey in Asia:				
Smyna.....	July 29-Oct. 12....	293	179	Aug. 9, 1 case on s. s. Carlsbad.
Trebizond.....	Oct. 29.....	.....	.....	Present among troops.
Turkey in Europe:				
Constantinople.....	Aug. 2-Oct. 26....	31	27	
Dardanelles—				
Boulair.....	.....	.....	.....	Oct. 28, present.
Gallipoli.....	Sept. 17-Oct. 28....	.....	.....	Present.
Maidos.....	Sept. 8.....	.....	3	
Kalemi.....	Oct. 12.....	2	.....	Isle of Marmora.
Kavak.....	Aug. 8-22.....	98	50	Sept. 30, still present.
Rodosto.....	Sept. 17-Oct. 5....	12	8	
Saloniki (Macedonia).....	.....	.....	.....	July 19-Aug. 8, epidemic.
Saloniki.....	July 7-Oct. 12....	511	458	Among civilians. July 10, present in Kavala, Drama, Orhana, Serres, and Stroumitza.
Silviri.....	Oct. 15-27.....	4	4	

YELLOW FEVER.

Brazil:				
Bahia.....	May 11-Oct. 4....	42	22	
Manaos.....	June 30-July 5....	6	6	
Pernambuco.....	May 1-June 30....	.....	3	
Rio de Janeiro.....	May 25-Sept. 20....	4	4	Sept. 13—1 fatal case on s. s. Canova from Bahia. Oct. 30, 1 death.
Colombia:				
Cartagena.....	Aug. 23.....	1	.....	Contracted in the interior.
Cuba:				
Habana.....	July 16.....	.....	.....	1 case on s. s. Hydra, which left Manaos June 17, Para June 21. Four deaths occurred in voyage; 2 at Manaos, 1 at Guantamano, and 1 at Cienfuegos.
Do.....	Aug. 8-14.....	1	.....	From steamship Morro Castle, passenger from Campeche.
Ecuador:				
Babahoyo.....	June 1-July 31....	2	2	
Bucay.....	June 1-Aug. 31....	3	2	
Duran.....	May 1-31.....	1	.....
Guayaquil.....	May 1-Sept. 30....	33	21	Nov. 6, increasing.
Milagro.....	May 1-Aug. 31....	21	11	
Naranjito.....	do.....	12	9	
Mexico:				
Campeche.....	Oct. 18.....	26	11	Total May 25-Sept. 20: Cases, 27; deaths, 15.
Carmen.....	Oct. 11.....	.....	.....	Present.
Maxcanu.....	Aug. 23-Sept. 6....	2	2	Case, Aug. 23, from Campeche.
Southern Nigeria:				
Forcados.....	Oct. 31.....	1	.....
Lagos.....	May 12.....	1	.....	July 23-Aug. 22: Epidemic; Oct. 15, still present.
Worri.....	June 1-30.....	.....	.....	Present.
Venezuela:				
Caracas.....	Feb. 1-28.....	1	.....
Do.....	May 1-31.....	1	.....	From Valencia.
Do.....	July 1-31.....	1	1	
Do.....	Oct. 1-31.....	1	.....	Do.

PLAGUE.

Arabia:				
Aden.....	June 3-25.....	8	4	Total Apr. 9-June 25: Cases, 81; deaths, 59.
Debal.....	.....	.....	.....	Aug. 31, free; reported, p. 656, Pt. I.
Argentina:				
.....	.....	.....	.....	Nov. 6, outbreak, with 25 deaths in 4 localities west from Rosario.
Brazil:				
Bahia.....	May 11-Oct. 18....	131	67	
Rio de Janeiro.....	July 27-Sept. 20....	2	2	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to Nov. 21, 1913—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
British East Africa.....	May 15-June 12.....			1 death.
Kisumu.....	May 15-Sept. 1.....	6	1	
Mombasa.....	May 1-Sept. 11.....	89	73	Apr. 25-30, 15 deaths.
Nairobi.....	May 15-Sept. 11.....	9	5	
Cephalonia Island.....	Oct. 4.....			Present.
Chile:				
Iquique.....	May 11-Oct. 4.....	45	19	
China.....				May 18-June 14; still present in Amoy, Chaoyang, Fungshun, Kityang, Puning, Ta-bu, and other points along the railway.
Amoy.....	Apr. 1-Aug. 25.....		409	May 25-June 7, 10 to 20 deaths daily; Sept. 22, free.
Kulangsu.....	Jan. 1-May 24.....		29	June 7, 1 or 2 deaths daily.
Canton.....				Apr. 1-June 30: Cases, 229. Apr. 10-May 22, 300 fatal cases in the Sunning district.
Hongkong.....	May 18-Oct. 4.....	288	242	
Kaochow.....	Apr. 10-May 22.....			10 deaths daily.
Macao.....	July 3.....			Present Aug. 7, 1913.
Shanghai.....	June 1-15.....	8	7	Among natives.
Swatow.....	July 12.....			Decreasing along the Swatow Chaochowfu Railway.
Dutch East Indies:				
Java—				
Districts—				
Kediri.....	Apr. 1-Aug. 31.....	1,102	932	
Madioen.....	do.....	402	371	
Malang.....	do.....	2,833	2,724	
Surabaya.....	do.....	122	115	
Madura—				
Bangkalan.....	July 13-Aug. 9.....	34	27	And district, Nov. 6, 112 cases.
Ecuador:				
Guayaquil.....	May 1-Sept. 30.....	94	28	
Milagro.....	May 1-July 31.....	1	1	
Egypt.....				Total, Jan. 1-Oct. 15: Cases, 626; deaths, 292.
Alexandria.....	May 28-Oct. 3.....	30	14	
Port Said.....	June 2-Sept. 9.....	18	6	Aug. 11, 2 fatal cases.
Provinces—				
Behera.....	June 13-Oct. 2.....	11	4	
Fayoum.....	May 30-Oct. 11.....	46	16	
Galloubek.....	May 21-Sept. 12.....	7	2	
Garbieh.....	May 27-Sept. 13.....	55	40	Jan. 1-May 26: Cases, 12; deaths, 5.
Girgeh.....	Oct. 1.....	1	1	
Gizeh.....	May 29-July 1.....	6	1	
Menouf.....	May 28-Aug. 27.....	3	3	Jan. 1-May 26: Cases, 51; deaths, 24.
Minieh.....	May 30-Sept. 7.....	29	10	
German East Africa:				
Districts—				
Usmawo—				
Misungi.....	Mar. 15-May 10.....			Present.
Nora.....	do.....			Do.
Urima.....	do.....			Do.
Muanza.....	Mar. 15-June 11.....	503	459	Aug. 24, fatal case from s. s. Sybil.
Greece:				
Athens.....	Aug. 29.....	1		
Piræus.....	Aug. 21-Sept. 3.....	8	2	
India:				
Bombay.....	May 18-Oct. 11.....	694	593	
Calcutta.....	Apr. 27-Sept. 27.....		302	
Karachi.....	May 18-Oct. 4.....	173	154	
Rangoon.....	May 1-Aug. 31.....	305	288	
Provinces.....				Total, May 4-Sept. 13: Cases, 28,963; deaths, 23,482.
Delhi.....	May 4-Aug. 2.....	24	18	
Bombay.....	May 4-Sept. 13.....	6,681	4,701	
Madras.....	do.....	555	516	
Bengal.....	do.....	308	316	
Bihar and Orissa.....	do.....	1,690	1,372	
United Provinces.....	do.....	9,495	8,156	
Punjab.....	do.....	6,685	5,580	
Burma.....	do.....	1,289	1,213	
Coorg.....	June 22-Aug. 30.....	10	8	
Central Provinces.....	May 4-17.....	2	1	
Mysore.....	May 4-Sept. 13.....	1,542	1,056	
Hyderabad.....	do.....	347	265	
Central India.....	May 4-31.....	9	9	
Rajputana.....	May 4-Sept. 13.....	206	179	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Nov. 21, 1913—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
India—Continued.				
Provinces—Continued.				
Kashmir	May 4-Aug. 2	65	44	
North West Province	May 4-Sept. 13	55	48	
Indo-China				Total, Jan. 1-Sept. 10: Cases, 2,745; Jan. 1-July 10: Deaths, 2,547.
Saigon	June 17-Aug. 25	63	40	
Japan:				
Taiwan—				
Kagi	June 1-July 19	81	63	
Yokohama	Sept. 19-Oct. 29	12	1	
Mauritius	Apr. 18-Sept. 18	68	46	Total, Jan. 1-Aug. 28: Cases, 126; deaths, 70.
Morocco:				
Casablanca	Oct. 2	1		
Rabat	Oct. 19-25	3		
Persia				June 5, in Kermanschah Province, 150 cases, at Caravadeh, Harounabad, and Loud. June 11, present in vicinity of Abassabad.
Djame-Chouran	May 31-Sept. 13	37	21	
Faizabad	June 11		3	
Gommi	June 11		11	
Harounabad	May 20-June 25	71	51	
Larzangueneh	May 27-June 15	30	28	
Mahi-Dacht	June 4	2	2	
Taybat	June 11		3	
Zebryi	May 31-June 25	14	10	
Peru:				
Departments—				
Ancachs—				
Chimbote	July 28-Sept. 7	2		
Arequipa—				
Mollendo	Apr. 28-Oct. 12	16	2	
Callao	June 30-Sept. 21	6		
Caxamarca—				
Cutervo	June 9-Aug. 17	5		
Chota	June 30-July 27			Present.
Libertad—				
Chiclayo	Apr. 28-June 8	1	1	
Salaverry	June 4-Aug. 17	3	1	
San Pedro	June 4-Oct. 12	9	2	
Trujillo	May 19-Oct. 12	13		
Lima	do	24		
Monsefu	Oct. 6-12	12		
Plura	June 30-July 27			Present.
Catacaos	Sept. 2-Oct. 6	2		
Piura	do	1		
Philippine Islands:				
Manila	May 11-24	3		Fourth quarter 1912: Cases, 39; deaths, 33. First quarter 1913: Cases, 8; deaths, 7. Second quarter: Cases, 9; deaths, 7.
Do	Sept. 21-27	1	1	
Russia:				
Astrakhan				Aug. 2, 2 fatal cases. Pneumonic form.
Tsarev	June 3-10		9	
Acheozek	Aug. 22	1	1	
Diamantai-Toubek	July 15-Aug. 17	6	6	
West Turkestan—				
Semiretchji territory—				
Prjevalsk district	Sept. 25	26	26	Among the Tourguen.
Siam:				
Bangkok	Mar. 23-Sept. 6		18	
Korat	Mar. 21-31			Epidemic.
Straits Settlements:				
Singapore	June 15-21	1	1	
Tripoli:				
Derma	July 15			Present.
Tripoli	July 1-Sept. 30	56	19	
Turkey in Asia:				
Adalia	Aug. 30	1		
Basra	July 14-21	1	1	To June 3, 31 cases. In the prison.
Trebizond	Sept. 29-Oct. 4	11	2	
Uruguay:				
Montevideo				July 28, present.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to Nov. 21, 1913—Continued.

SMALLPOX.

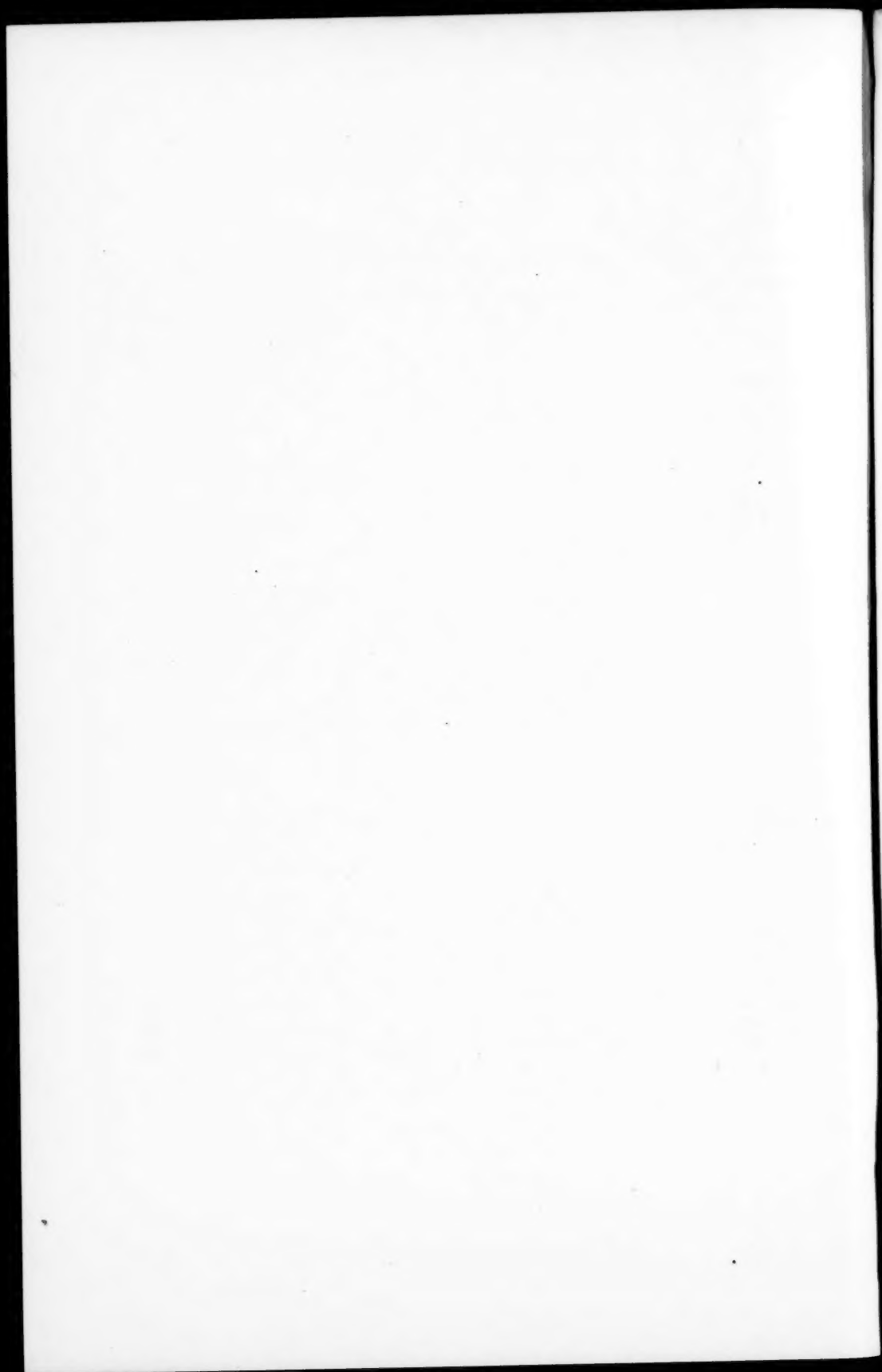
Places.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Departments—				
Algiers.....	May 1-July 31.....	11		
Constantine.....	Apr. 1-July 31.....	27		
Oran.....	May 1-July 31.....	59		
Arabia:				
Aden.....	June 3-9.....	1		Oct. 6, 1 case.
Argentina:				
Buenos Aires.....	Apr. 1-July 31.....		11	
Australia:				
New South Wales.....				Total July 1-Sept 26: Cases, 829.
Albury.....	Sept. 12-26.....	1		Sydney district, 810 cases.
Coolah.....	do.....	1		
Cootamundra.....	Aug. 7-Sept. 26.....	1		
Goulburn.....	July 1-31.....	1		
Illabo.....	Aug. 7-Sept. 11.....	1		
Hardon.....	do.....	1		
Lithgow.....	July 1-31.....	1		
Liverpool.....	Aug. 7-Sept. 11.....	2		
Newcastle.....	July 1-31.....	1		
Nynan.....	July 1-31.....	1		
Parkes.....	do.....	5		
Penrith.....	do.....	2		
Sydney.....	July 1-Sept. 11.....	721		
Taree.....	July 1-31.....	2		
Ullasarra.....	do.....	2		
Wellington.....	Sept. 12-26.....	1		
Queensland—				
Brisbane.....	Aug. 7-Sept. 11.....	1		
Ipswich.....	July 1-Sept. 11.....	4		
Toowoomba.....	July 1-31.....	1		
South Australia.....	July 17-Aug. 2.....	1		
Victoria—				
Melbourne.....	July 14.....			1 case on s s. Karoola from Sydney.
Austria-Hungary:				
Capodistria.....	Oct. 5-11.....	2		
Coastland.....	July 6-12.....	1		
Decani.....	Oct. 5-11.....	2		
Fiume.....	May 27-July 7.....	19	1	
Galicia.....	July 6-Aug 12.....	1		
Gorz and Gradinska.....	Aug. 7-14.....	1		
Krain.....	do.....	1		
Trieste.....	June 1-Oct. 11.....	43	1	Cases June 14 from Patras.
Tyrol and Vorarlberg.....	Aug. 10-Oct. 11.....	13		
Belgium:				
Antwerp.....	July 1-7.....	1		
Brazil:				
Bahia.....	May 11-Oct. 18.....	14	1	
Manaos.....	June 15-21.....	1		
Para.....	June 15-Nov. 1.....	75	39	
Pernambuco.....	May 1-Sept. 30.....		250	
Rio de Janeiro.....	May 4-Oct. 4.....	179	27	
British East Africa:				
Mombasa.....	Mar. 1-June 30.....	29	9	
Canada:				
Provinces—				
British Columbia—				
Vancouver.....	June 8-Sept. 13.....	2		
Manitoba—				
Winnipeg.....	June 15-Oct. 18.....	20		
Nova Scotia—				
Sydney.....	July 14-Aug. 2.....	2		Case July 14 from s.s. Hartlepool from Marseille.
Ontario—				
Hamilton.....	Oct. 1-31.....	3		
Fort William.....	June 10-30.....	4		
Ottawa.....	June 8-Oct. 4.....	12		
Toronto.....	June 16-Aug. 2.....	9		
Quebec—				
Grosse Isle Quarantine.....	June 20.....	1	1	In steerage.
Quebec.....	June 8-Sept. 20.....	6		
Montreal.....	July 6-Nov. 1.....	70	2	
St. Johns.....	May 25-July 5.....	4		
Chile:				
Iquique.....	June 1-21.....	2		
Santiago.....	June 15-29.....			Present. Aug. 16-Sept. 13, epidemic.
Valparaiso.....	July 12.....			Present.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Nov. 21, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	May 25-June 7.....			Present.
Kulangsu.....	May 25-31.....			Do.
Chungking.....	Aug. 2.....			Do.
Dalny.....	July 27-Oct. 20.....	2	1	
Hohow.....				Aug. 22, free.
Hongkong.....	May 18-June 14.....	9	7	
Nanking.....	May 11-Sept. 27.....			Do.
Shanghai.....	May 19-Sept. 20.....	8	47	Deaths among natives.
Tientsin.....	June 8-14.....		1	
Dutch East Indies.....				Sept. 8-15, present in Iatrittan Klatten, and Soerakarta.
Java—				
Batavia.....	June 22-Sept. 13.....	17	6	
Surabaya.....	May 11-Aug. 29.....	11	5	
Egypt:				
Alexandria.....	May 28-Oct. 7.....	25	17	
Cairo.....	May 14-Sept. 9.....	42	10	
France:				
Limoges.....	Sept. 1-30.....		21	
Lyon.....	June 23-29.....		1	
Marseille.....	May 1-Sept. 30.....		97	
Nantes.....	Aug. 3-9.....	1		
Paris.....	May 25-Sept. 27.....	25		
St. Etienne.....	Sept. 21-Oct. 15.....	1	1	
Toulon.....	Aug. 18.....	1		
Germany.....				Total June 8-Oct. 4: Cases, 7.
Berlin.....	Aug. 24-30.....	1		
Kehl.....	June 1-July 31.....	2	1	
Strassburg.....	Aug. 1-31.....	1		
Great Britain:				
Hull.....	Sept. 14-20.....	1		
Liverpool.....	May 25-Oct. 18.....	6	1	
Manchester.....	July 20-26.....	1		
Greece:				
Patras.....	June 9-Aug. 31.....		9	
India:				
Bombay.....	May 26-Oct. 4.....	74	67	
Calcutta.....	Sept. 13-27.....		2	
Karachi.....	May 25-Aug. 16.....	13	4	
Madras.....	May 24-Oct. 4.....	31	13	
Moulmine.....	Mar. 30-June 28.....	5	5	
Do.....	Aug. 3-9.....	1	1	
Rangoon.....	May 1-Aug. 31.....	50	20	
Indo-China:				
Salgon.....	July 8-14.....	1	1	
Italy:				
Naples.....	Aug. 2-15.....	3		
Rome.....	Jan. 5-11.....	1	1	
Japan.....				Total Jan. 1-July 31: Cases, 37; deaths, 29.
Hokkaido.....	Apr. 1-30.....	1		
Kanagawa ken.....	May 1-31.....	1		
Kobe.....	June 23-29.....	1		
Nagasaki ken.....	May 1-July 31.....	54	14	
Oita ken.....	May 1-June 30.....	11	4	
Tokyo.....	June 18-July 31.....	11	7	
Yokohama.....	Aug. 19-25.....	1	1	Aug. 18, epidemic.
Luxemburg:				
Esch.....	May 17-31.....	2		
Mauritius.....	Apr. 13-July 5.....	1,019	106	
Mexico:				
Acapulco.....	May 25-Aug. 16.....		5	
Agua Calientes.....	June 9-Nov. 2.....		34	
Chihuahua.....	June 23-Aug. 2.....		9	
Guadalajara.....	June 8-Oct. 18.....	80		
Hermosillo.....	June 7-Sept. 13.....	126	85	Among troops.
Manzanillo.....	July 18.....			Present.
Mexico.....	Apr. 20-Sept. 20.....	235	130	
Monterey.....	June 9-Aug. 31.....		7	
Oaxaca.....	Oct. 12-18.....		1	
Panuco.....	Sept. 12.....	30		
Puerto Mexico.....	July 1-31.....		3	
San Luis Potosi.....	Apr. 27-Sept. 20.....	24	13	
Saltillo.....	Aug. 1-June 30.....		25	
Veracruz.....	June 16-Oct. 31.....	15	2	
Tampico.....	Sept. 16-Oct. 20.....	3	2	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Nov. 21, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Newfoundland:				
St. Johns.....	June 15-Oct. 18...	39		
Peru.....				Sept. 30, epidemic in Ancon, Callao, Chancay, Huaco, and Lima. Sept. 27, still present in Ancon and Huaco. In Lima Jan. 1-June 30, 235 cases were admitted to the lazaretto.
Philippine Islands.....				First quarter, 1913: Cases, 57; second quarter, cases, 63.
Portugal:				
Lisbon.....	May 25-Oct. 18...	72		
Russia:				
Batoum.....	Apr. 1-May 31.....	4		
Libau.....	June 2-July 20.....	3	1	
Moscow.....	May 18-Oct. 4.....	90	22	
Odessa.....	June 8-Aug. 23.....	58	15	
Riga.....	June 22-28.....	6		
St. Petersburg.....	May 18-Oct. 18...	30	2	
Siberia—				
Vladivostok.....	May 7-June 20.....	3		
Warsaw.....	Feb. 23-Aug. 30...	70	31	
Samoa:				
Apia.....				May 18, 1 death on transport Michael Jepson, from Hong-kong, and to June 4, 4 cases transferred from this vessel to a lighter 3 miles east.
Servia:				
Belgrade.....	June 1-Sept. 27....	16	3	July 16, present in Dubotzi, Neresnitza, and Volui.
Siam:				
Bangkok.....	Mar. 23-Aug. 9....		11	
Spain:				
Almeria.....	June 1-Aug. 31.....		6	
Barcelona.....	June 8-Oct. 11.....		87	
Cadiz.....	May 1-Sept. 30.....		5	
Madrid.....	June 1-Sept. 30.....		160	
Malaga.....	Aug. 1-31.....		1	
Seville.....	July 1-31.....		1	
Valencia.....	June 1-Oct. 4.....	5		
Straits Settlements:				
Singapore.....	May 4-10.....	1	1	
Switzerland:				
Cantons—				
Basel.....	June 1-Sept. 20....	37		
Zurich.....	May 18-24.....	1		From Paris.
Turkey in Asia:				
Beirut.....	May 25-Oct. 25....	94	51	
Damascus.....	June 1-7.....			Present.
Mersina.....	May 25-July 12.....		3	
Smyrna.....	Apr. 26-Aug. 2.....		67	
Turkey in Europe:				
Constantinople.....	June 1-Oct. 11.....		76	
Saloniki.....	June 2-Oct. 12.....	39	39	
Union of South Africa:				
Johannesburg.....	May 10-June 7....	23		
Uruguay:				
Montevideo.....	Sept. 16-30.....		1	
West Indies:				
Trinidad.....	Aug. 19.....	2		On s. s. Danube and placed in quarantine 5 miles distant.



SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

DISTRICT OF COLUMBIA.

Tuberculosis—School Children. (Reg. of Commissioners, Oct. 4, 1913.)

Section 19 of the rules governing the medical inspection of public schools in the District of Columbia was amended by the addition of the following:

"A pupil who has been excluded because suffering from a communicable form of tuberculosis may be permitted to return only on the presentation of a certificate issued by the health officer authorizing him so to do."

MASSACHUSETTS.

Tenement Houses—Construction, Maintenance, and Alteration of. (Chap. 786, Act June 13, 1913.)

PART I.

GENERAL PROVISIONS.

SECTION 1. *Short title.*—This act shall be known as the tenement house act for cities.

(Section 2 gives definitions of terms used in the act.)

SEC. 3. *Buildings converted or altered.*—A building not a tenement house, if hereafter converted or altered to such use, shall thereupon become subject to all the provisions of this act affecting tenement houses hereafter erected.

SEC. 4. *Alterations and change of occupancy.*—No tenement house hereafter erected shall at any time be altered so as to be in violation of any provision of this act. If any tenement house or any part thereof is occupied by a number of families in excess of the number specified in this act, or is erected or altered or occupied contrary to law, such tenement house shall be deemed an unlawful structure, and the board of health may cause such building to be vacated; and it shall not again be occupied until it or its occupation, as the case may be, has been made to conform to the law, and a permit is obtained in writing from the board of health.

SEC. 5. *Law not to be modified.*—This act shall be held to provide the minimum requirements adopted for the protection of the health and safety of the community. Nothing in this act contained shall be construed as prohibiting any city from enacting from time to time supplementary ordinances imposing further restrictions, but no city authority shall have power to minimize, avoid, or repeal any provision of this act.

SEC. 6. *Sewer connection and water supply.*—The provisions of this act with reference to sewer connection and water supply shall be deemed to apply only where connection with a sewer and with a water main is or becomes accessible. The questions of the practicability of such sewer and water connections shall be decided by the local board of health, or by the State board of health upon request of the local board.

SEC. 7. *State board of health.*—The State board of health shall have power to examine into the enforcement of the laws relating to tenement houses in any city. Whenever so required by the governor, it shall make such an examination and shall report the result thereof to the governor within the time prescribed by him.

SEC. 8. *Time for compliance.*—All improvements specifically required by this act upon tenement houses erected prior to the date of its acceptance by a city shall be made within one year from said date, or at such earlier period as may be fixed by the building inspector.

PART II.

TITLE 1. LIGHT AND VENTILATION.

SEC. 9. *Distance from side lot line.*—No tenement house of third-class construction shall hereafter be erected, enlarged or placed with the side walls, bay windows or other projections, except cornices, belt courses, and window sills, nearer than 5 feet to the line of any adjoining lot, nor shall any lot upon which such a tenement house stands be so changed in size as to bring the side walls or bay windows or other projections except as aforesaid nearer than 5 feet to the line of any adjoining lot. But any such tenement house may be constructed to the lot line if protected by a fire wall as provided in section 46. If the side walls of any tenement house of first or second class construction are built to the lot line, there shall be no windows or any other openings in such walls.

SEC. 10. *Height.*—No tenement house hereafter erected shall have more than one legally habitable story for each full 10 feet of the width of the street, unless such house be set back from the street a distance equal to the excess of its height over that permitted at the street line. On a corner lot the height shall be governed by the width of the wider street, as above, but this height shall not extend along the narrower street a distance greater than twice the width of said street.

SEC. 11. *Yards.*—Behind every tenement house hereafter erected there shall be a yard extending across the entire width of the lot and at every point open from the ground to the sky unobstructed, except as hereinafter provided. Every part of such yard shall be directly accessible from every other part thereof. The depth of said yard shall be measured from the extreme rear of the house toward the rear line of the lot. Where the rear of the lot abuts on a public alley or right of way dedicated to public use for the full width of the lot, the depth of the lot may be measured to the middle line of such alley or right of way; where there is no such alley or right of way the measurements shall be taken to the rear lot line. If the tenement house is three stories or less in height, the depth of the yard in the case of interior lots shall be not less than 15 feet, and the depth of the yard in the rear of corner lots shall be not less than 10 feet. If the tenement house exceeds three stories in height, the depths above prescribed in the case of interior lots shall be increased 5 feet and in the case of corner lots shall be increased 2 feet for each story above three stories. When

a lot upon which a tenement house is built is bounded on every side by a street the yard may be omitted.

SEC. 12. *Courts.*—The sizes of all courts in tenement houses hereafter erected shall be proportionate to the height of the building. No court shall be less in any part than the minimum sizes prescribed in this section. The minimum width of a court for a two-story building shall be 10 feet, and the width shall increase 2 feet for each additional story. The length of an inner court shall never be less than twice the minimum width prescribed by this section. The length of an outer court shall never be greater than twice its minimum width unless provided at the inner end with an air intake at the bottom, as prescribed in section 14, which shall communicate directly with the street or yard or front yard.

The minimum width for an outer court on the lot line extending from the street or front yard to the yard shall be 10 feet for a three-story building, and the width shall increase 1 foot for each additional story.

SEC. 13. *Courts open at top.*—No court of a tenement house hereafter erected shall be covered by a roof or skylight, but every court shall be at every point open from the ground to the sky unobstructed.

SEC. 14. *Air intakes.*—In every tenement house hereafter erected, four stories or under in height, every inner court shall be provided with one or more horizontal air intakes at the bottom. Such intakes shall communicate directly with the street, front yard or yard, and shall consist of a fireproof passageway not less than 3 feet wide and 7 feet high which shall be left open, or be provided with an openwork gate at each end, and such gate shall not be covered over in any way either by glass or any other material. If the tenement house is over four stories in height there shall be two or more such intakes, one communicating with the street or front yard and one with the yard.

SEC. 15. *Extensions or offsets to courts.*—Extensions or offsets to courts in tenement houses hereafter erected are permitted for the purpose of lighting bathrooms, water-closets, and corridors only, but no such extension or offset shall be less than 6 feet in width in any part; its depth may be less than but never greater than its width. Such dimensions shall be deemed the minimum dimensions for a two-story house and shall increase 1 foot for each story above two stories.

SEC. 16. *Angles in courts.*—Nothing contained in the foregoing sections concerning courts shall be construed as prohibiting the building of walls across the angles of said courts to contain windows: *Provided*, That the running length of the wall containing such windows does not exceed 6 feet.

SEC. 17. *Building on same lot with tenement houses.*—If any building is hereafter placed on the same lot with a tenement house there shall always be maintained between the said buildings an open unoccupied space extending upward from the ground and extending across the entire width of the lot. Such space shall never be less than 25 feet in depth and where either building exceeds three stories in height the depth of such open space shall be increased 5 feet for each story above three stories. And no building of any kind shall hereafter be placed upon the same lot with a tenement house so as to diminish the minimum size of courts or yards as hereinbefore prescribed, except that where an alley not less than 10 feet wide abuts the rear of the lot, a rear building, if not used for tenement house or stable or manufacturing purposes, may be built up to the rear line of the lot: *Provided*, That it does not exceed one story in height and that the space between it and the front building is maintained as required by this section. And if any tenement house is hereafter erected upon any lot upon which there is already another building, it shall

comply with all the provisions of this act, and, in addition, the space between the said building and the said tenement house shall be of such size and arranged in such manner as is prescribed in this section, the height of the highest building on the lot to regulate the dimensions.

SEC. 18. Rear tenements.—No tenement house shall hereafter be erected upon the rear of a lot where there is a building on the front of the said lot, nor upon the front of any such lot upon the rear of which there is a tenement house or stable or building used for manufacturing purposes. This provision shall not apply to tenement houses abutting on two streets and situated on the outside corner of the lot.

SEC. 19. Rooms, lighting, and ventilation of.—In every tenement house hereafter erected every apartment shall have at least one room with a window opening directly upon the street or yard, and every room in such tenement house shall have at least one window opening directly upon the street or upon a yard or court of the dimensions specified in this act, except that kitchenettes, pantries, water-closet compartments, and bathrooms may have such window opening upon an offset to a court, as provided in section 15, and such window shall be so located as properly to light all parts of such rooms.

SEC. 20. Windows in rooms.—In every tenement house hereafter erected the total area of the windows between stop beads in each room, including kitchenettes, water-closet compartments, and bathrooms, shall be at least one-seventh of the floor area of the room, and the top of at least one window shall be not less than 7 feet 6 inches above the floor, and the upper half of it shall be made so as to open the full width. No such room shall have less than 12 square feet of window area measured between stop beads, except that in kitchenettes, water-closet compartments, and bathrooms such windows shall be not less than 6 square feet in area between stop beads.

SEC. 21. Rooms, size of.—In every tenement house hereafter erected there shall be in each apartment at least one room containing not less than 150 square feet of floor area, and every other room, except kitchenettes, water-closet compartments, and bathrooms, shall contain not less than 84 square feet of floor area. All rooms shall be in every part not less than 8 feet 6 inches from the finished floor to the finished ceiling, except that a half-story room need be 8 feet 6 inches in height in but one-half of its area.

SEC. 22. Alcoves and alcove rooms.—In every tenement house hereafter erected an alcove in any room shall be separately lighted and ventilated as provided for rooms in the foregoing sections. No part of any room in a tenement house shall be inclosed or subdivided at any time, wholly or in part, by a curtain, portière, fixed or movable partition, or other contrivance or device so as to make an alcove unless the part of the room so inclosed or subdivided shall contain a separate window, as herein required, and shall have a floor area of not less than 84 square feet.

SEC. 23. Privacy.—In every tenement house hereafter erected, in each apartment, there shall be access to every living room and bedroom, and to at least one water-closet compartment without passing through a bedroom or bathroom or water-closet compartment.

SEC. 24. Public halls, lighting and ventilation of.—In every tenement house hereafter erected every public hall and stair hall shall have at each story at least one window opening directly upon the street or upon a yard or court of the dimensions specified in this chapter. Such window in a public hall shall be at the end of the hall with the natural direction of the light parallel to the hall's axis. Any part of a public hall which is in any way shut off from any other part of the hall shall be deemed a separate hall within the meaning of this section.

SEC. 25. Windows for public and stair halls, size of.—In every tenement house hereafter erected the windows provided to light and ventilate each public hall and stair hall, or part thereof, shall contain not less than 12 square feet clear opening, measured between stop beads. The top of one such window shall be not less than 7 feet 6 inches above the floor, and the upper half thereof shall be made so as to open the full width. A sash door shall be deemed the equivalent of a window in this and the foregoing section: *Provided*, That said door contains a clear opening of the size prescribed for such windows. In every tenement house of three or more stories there shall be in the roof directly over each stair well a ridge ventilator having a minimum opening of 40 square inches and with fixed or movable louvers.

TITLE 2. SANITATION.

SEC. 26. Basement and cellar rooms.—In tenement houses hereafter erected no room in the cellar or basement shall be constructed, altered, converted, or occupied for living purposes unless, in addition to the other requirements of this act, all of the following conditions are complied with: In a cellar no room shall be so occupied unless it is in every part entirely above the finished grade of the adjoining land. Such occupied cellar shall be counted as a story in determining the size of courts and yard. In a basement no room shall be so occupied unless the ceiling in every part is at least 4½ feet above the curb level of the street in front of such room. Every such room shall be an integral part of an apartment containing a room opening directly upon the street or yard. There shall be appurtenant to every such apartment a separate water-closet, constructed and arranged as required by section 31 of this act. All walls surrounding such room and the floors thereof shall be damp proof.

SEC. 27. Cellars, damp proofing and lighting of.—Every tenement house hereafter erected shall have the cellar floor and the walls below the ground level damp proof. All cellars and basements in such tenement houses shall be properly lighted and ventilated in all their parts to the satisfaction of the board of health.

SEC. 28. Spaces under floors.—In any tenement house hereafter erected, under any part of which there is no cellar, the first story shall be at least 2 feet above the ground beneath and that adjacent thereto, and the space beneath such floor shall be kept free and clear and shall be inclosed to prevent the accumulation of rubbish, but provided with ample ventilation and adequate drainage.

SEC. 29. Drainage of courts, areas, and yards.—In every tenement house hereafter erected all courts, areas, and yards shall be properly graded and drained and connected with the street sewer subject to the provisions of section 6. And when necessary in order to keep such premises in a sanitary condition such courts, areas, or yards, or such part thereof as the board of health shall order, shall be properly paved.

SEC. 30. Sinks.—In every tenement house hereafter erected there shall be provided in each apartment a proper sink.

SEC. 31. Water-closets.—In every tenement house hereafter erected there shall be within each apartment a separate water-closet, located in a bathroom or in a separate compartment: *Provided*, That where there are apartments of but one or two rooms there shall be at least one water-closet for every two such apartments, and such water-closet shall not open into any apartment but shall be accessible through a public hall, and the door thereof shall be provided with lock and keys, and such compartment and water-closet shall comply in all other respects with the provisions of this act. Said compartment shall be not less than 3 feet wide, and shall be inclosed with brick, concrete, stone, tiled, or

plastered partitions which shall extend to the ceiling. No wooden sheathing or wainscotting shall be permitted. Every such compartment shall have a window opening directly upon the street or upon a yard or court of the minimum size prescribed by this act. Every water-closet compartment hereafter placed in any tenement house shall be provided with proper means of lighting the same at night. The floor of every such water-closet compartment shall be made waterproof with asphalt, tile, stone, or some other nonabsorbing waterproof material; and such waterproofing shall extend at least 6 inches above the floor so that the floor can be washed or flushed out without leaking. When the water-closet fixture is located in a bathroom the floor directly beneath the fixture and extending at least 1 foot beyond it in each direction shall be waterproofed as above provided. No drip trays shall be permitted. No water-closet fixtures shall be inclosed with any woodwork. No water-closet shall be placed out of doors nor in the cellar of any tenement house, except as provided in section 26 or as an appurtenance to an engine or boiler room or laundry, and then only in case such cellar closet is lighted and ventilated as required herein for a basement room.

SEC. 32. Plumbing.—In every tenement house hereafter erected plumbing fixtures shall not be inclosed with woodwork. All plumbing pipes shall be exposed, except as may otherwise be permitted by the board of health. Wherever plumbing or other pipes pass through floors or partitions they shall pass through metal bushings or casings extending entirely through the floor or partition, and the inner diameter of such bushing or casing shall in no case exceed the outer diameter of such pipe by more than one thirty-second of 1 inch, and such bushings or casings shall be so set in floors or partitions as to be externally air tight. All plumbing work shall be sanitary in every particular and, except as otherwise specified in this act, shall be in accordance with the local plumbing regulations. Pan and long hopper closets are hereby prohibited.

SEC. 33. Water connections.—In every tenement house hereafter erected all sinks and water-closets shall be provided with an adequate supply of running water as approved by the board of health.

SEC. 34. Privies and privy vaults.—No privy or privy vault shall be permitted on the same lot with any tenement house hereafter erected.

(Title 3, secs. 35 to 48, inclusive, relates to fire protection.)

PART III.

IMPROVEMENTS.

SEC. 49. Rooms, lighting and ventilating of.—No room or alcove in a tenement house erected prior to the acceptance of this act shall hereafter be occupied for living purposes unless it shall have a window with an area of not less than 10 square feet between stop beads opening directly upon the street, or upon a yard not less than 10 feet deep, or above the roof of an adjoining building, or upon a court of not less than 30 square feet in area, open to the sky without roof or skylight.

SEC. 50. Public halls, lighting and ventilating of.—In every tenement house erected prior to the acceptance of this act, the public halls and stairs shall be provided with sufficient light to permit the reading of 12-point type in the daytime in any part thereof. Light and ventilation in such halls shall be from the outer air, except when in the opinion of the building inspector it is impracticable, in which case the lighting and ventilation shall be such as to meet the approval of the board of health.

All new skylights hereafter placed in such a house shall be provided with ridge ventilators having a minimum opening of 40 square inches, and also with either fixed or movable louvres, or with movable sashes, and shall be of such size as may be determined to be practicable by the building inspector.

SEC. 51. Sinks.—In every tenement house erected prior to the acceptance of this act, the woodwork inclosing sinks placed in the public halls or stairs shall be removed and the spaces underneath shall be left open. The floors and wall surfaces beneath and around the sink shall be put in good order and repair, and if of wood shall be well painted with light-colored paint.

SEC. 52. Water-closets.—In every tenement house erected prior to the acceptance of this act the woodwork inclosing every water-closet fixture shall be removed, and the space underneath the seat shall be left open. The floor and other surfaces beneath and around the closet shall be put in good order and repair, and if of wood shall be well painted with light-colored paint.

SEC. 53. Privy vaults, school sinks, and water-closets.—In every tenement house erected prior to the acceptance of this act, where a connection with a sewer is possible, all cesspools, school sinks, privy vaults, or other similar receptacles used to receive fecal matter, urine, or sewage shall, within one year after the acceptance of this act, be completely removed and the places where they were located properly disinfected under the direction of the board of health. Such appliances shall be replaced by individual water-closets of durable non-absorbent material, properly sewer-connected, with individual traps and properly connected flush tanks providing an ample flush of water thoroughly to cleanse the bowl. Each water-closet shall be located inside the tenement house in a compartment completely separated from every other water-closet, and such compartment shall contain a window of not less than 3 square feet in area opening directly upon the street, or yard, or on a court of which the least dimension is not less than 3 feet and the area not less than 15 square feet. The floors of the water-closet compartment shall be waterproof, as provided in section 31 of this act. There shall be provided at least one water-closet for each apartment in every tenement house existing on the day when this act takes effect, unless, in the opinion of the building inspector, this shall be impracticable; but in no case shall there be less than one water-closet for every two apartments. Such water-closets and all plumbing in connection therewith shall be sanitary in every respect, and, except as in this section otherwise provided, shall be in accordance with the laws, ordinances, and regulations in relation to plumbing and drainage. Pan and long hopper closets shall not be permitted.

SEC. 54. Basements and cellars.—Any part of a floor or wall below the adjoining grade, and in any case the lowest floor, shall be damp proof and, when necessary, shall be concreted with a finished surface. The cellar ceiling of every tenement house shall be plastered when so required by the building inspector, except where such ceiling is already well covered with a metal ceiling or where the first floor above the cellar is constructed of iron beams and fireproof filling.

SEC. 55. Shafts and courts.—In every tenement house there shall be at the bottom of every shaft and court a door giving sufficient access to such shaft or court to enable it to be properly cleaned out: *Provided*, That where there is already a window giving proper access to such shaft or court such window shall be deemed sufficient.

(Sections 56 and 57 relate to fire protection.)

PART IV.

ALTERATIONS.

SEC. 58. *General provisions.*—No tenement house erected prior to the acceptance of this act shall at any time be altered so as to be in violation of the requirements of Part II, except as hereinafter provided.

(1) Any additional room or hall that is hereafter constructed or created in a tenement house shall comply in all respects with the provisions of Part II of this act, except that such rooms may be of the same height as the other rooms in the same story of the house.

(2) All shafts shall be constructed fireproof throughout, with fireproof self-closing doors at all openings, at each story; and, if they extend to the cellar, shall also be inclosed in the cellar with fireproof walls and fireproof self-closing doors at all openings. In no case shall any shaft be constructed of materials in which any inflammable material or substance enters into any of the component parts. But nothing contained in this section shall be so construed as to require such inclosures about elevators or dumb-waiters in the wellhole of stairs where the stairs themselves are inclosed in brick or stone walls and are entirely constructed of fireproof materials, as hereinbefore provided.

(3) No tenement house of third-class construction containing more than two apartments shall hereafter be enlarged or extended, except that a wooden extension not exceeding in total area 70 square feet may be added to an existing wooden tenement house, provided that such extension is used solely for bathrooms or water-closets.

PART V.

MAINTENANCE.

SEC. 59. *Public halls, lighting of, in the daytime.*—In every tenement house where the public halls and stairs are not, in the opinion of the board of health, sufficiently lighted, the owner of the house shall keep a proper light burning in the hallway, near the stairs, upon each floor, as may be necessary, from sunrise to sunset.

SEC. 60. *Public halls, lighting at night.*—In every tenement house occupied by more than two families a proper light shall be kept burning by the owner in the public hallways, near the stairs, upon the entrance floor, and upon the second floor above the entrance floor of the house, every night from sunset to sunrise throughout the year, and upon all other floors of the said house from sunset until 10 o'clock in the evening.

SEC. 61. *Water-closets in cellars.*—No water-closet shall be permitted in the cellar of any tenement house, except as provided in sections 26 and 31.

SEC. 62. *Water-closet accommodations.*—In every tenement house existing prior to the acceptance of this act there shall be provided at least one water-closet for every two apartments.

SEC. 63. *Basement and cellar rooms.*—Hereafter in tenement houses erected prior to the acceptance of this act no room in the cellar shall be occupied for living purposes except as provided in section 26. And no room in the basement of such houses shall be so occupied, unless all the following conditions are complied with: Every such room shall be at least 8 feet high in every part from the floor to the ceiling, and the ceiling in every part shall be at least 4½ feet above the curb level of the street or the level of the yard or court in front of such room. There shall be appurtenant to every such room the use of a water-closet. Every such room shall have a window opening, as provided in section 51, of at least 12 square feet in size clear of the sash frame, and which

shall open readily for purposes of ventilation. The lowest floor shall be water-proof and damp proof. Every such room shall have sufficient light and ventilation, shall be well drained and dry, and shall be fit for human habitation.

SEC. 64. *Water-closets and sinks.*—In all tenement houses the floor or other surface beneath and around water-closets and sinks shall be maintained in good order and repair, and if of wood shall be kept well painted with light-colored paint.

SEC. 65. *Repairs.*—Every tenement house and all the parts thereof shall be kept in good repair, and the roof shall be kept so as not to leak, and all rain water shall so be drained and conveyed therefrom as to prevent dampness in the walls, ceilings, yards, or areas.

SEC. 66. *Water supply.*—Every tenement house shall have water furnished in sufficient quantity at one or more places in each apartment. The owner shall provide proper and suitable tanks, pumps, or other appliances to receive and distribute an adequate and sufficient supply of water at each apartment in the said house at all times of the year during all hours of the day and night. But a failure in the general supply of water furnished by the city authorities or from the freezing or bursting of pipes shall not be construed to be a failure on the part of such owner, provided that proper and suitable appliances to receive and distribute water have been provided in the said house.

SEC. 67. *Cleanliness of buildings.*—The owner of every tenement house shall cause every part of such tenement house to be kept clean and free from any accumulation of dirt, filth, and garbage or other refuse matter, in or on the same, or in the cellars, halls, passages, rooms, areas, yards, courts, and spaces appurtenant thereto. The owner shall thoroughly cleanse every part of a tenement house, whenever ordered so to do by the board of health.

SEC. 68. *Walls of courts.*—The walls of all courts, except those opening on a street, unless built of a light-colored brick or stone, shall be thoroughly whitened by the owner, or shall be painted a light color by him, and shall so be maintained. Such whitening or paint shall be renewed whenever necessary as may be required by the board of health.

SEC. 69. *Walls and ceilings of rooms.*—In all tenement houses the board of health may require the walls and ceilings of every room that does not open directly on the street to be whitened or painted with white paint when necessary to improve the lighting of such room, and may require this to be renewed as often as may be necessary.

SEC. 70. *Wall paper.*—No wall paper shall be placed upon the wall or ceiling of any tenement house unless the wall or ceiling has been thoroughly cleaned.

SEC. 71. *Receptacles for ashes, garbage and rubbish.*—The owner of every tenement house shall provide and maintain therefor suitable, covered, water-tight receptacles for ashes, rubbish, garbage, refuse and other like matter.

SEC. 72. *Prohibited uses.*—No swine shall be kept in a tenement house, or on the same lot therewith. No horse, cow, calf, sheep, goat, or fowl shall be kept in a tenement house, in on the same lot therewith within 25 feet of the tenement house. No tenement house, or the lot upon which it is situated, shall be used for the storage or handling of rags, nor as a place of public assemblage.

SEC. 73. *Combustible materials.*—No tenement house, and no part thereof, or of the lot upon which it is situated, shall be used as a place of storage, keeping or handling of any article dangerous or detrimental to life or health, nor for the storage, keeping, or handling of feed, hay, straw, excelsior, cotton, paper stock, feathers, rags, or other easily combustible articles.

SEC. 74. *Bakeries and fat boiling.*—No bakery and no place of business in which fat is boiled shall be maintained in any tenement house.

SEC. 75. *Other dangerous businesses.*—There shall be no transom, window, or door opening into a hall from any part of a tenement house where paint, oil, spirituous liquors, or drugs are stored for the purpose of sale or otherwise.

SEC. 76. *Janitor or housekeeper.*—For any tenement house in which the owner thereof does not reside, there shall be a janitor, housekeeper, or other responsible person who shall have charge of the same if the board of health shall so require.

SEC. 77. *Overcrowding.*—If a room in a tenement house is overcrowded, the board of health may order the number of persons sleeping or living in said room to be so reduced that there shall not be less than 400 cubic feet of air to each adult and 300 cubic feet of air to each child under 12 years of age occupying the room.

SEC. 78. *Lodgers.*—No tenement house and no part thereof shall be used for the letting of lodgings unless the person letting the same shall first file a notice in writing of the proposed letting in the office of the board of health, nor shall any person not a member of the family be taken to live within an apartment occupied by any family without such written notice. It shall be the duty of the owner of a tenement house to see that the provisions of this section are at all times complied with, and a failure so to comply on the part of any tenant, after due and proper notice from the owner, shall be deemed sufficient cause for the summary eviction of such tenant and the cancellation of his lease.

SEC. 79. *Repairs to buildings, etc.*—Whenever any tenement house or building, structure, excavation, business pursuit, matter, or thing, in or about a tenement house, or the lot on which it is situated, or the plumbing, sewerage, drainage, light, or ventilation thereof, is, in the opinion of the board of health, in a condition or in effect dangerous or detrimental to life or health, the board may declare that the same, to the extent which it may specify, is a public nuisance, and may order the same to be removed, abated, suspended, altered, or otherwise improved or purified, as the order shall specify. The board may also order or cause any tenement house or part thereof, or any excavation, building, structure, sewer, plumbing, pipe, passage, premises, ground, matter, or thing, in or about a tenement house, or the lot on which it is situated, to be purified, cleansed, disinfected, removed, altered, repaired, or improved. If any order of the board is not complied with, within 10 days after the service thereof, or within such longer or shorter time as the board may designate, then such order may be executed by said board through its officers, agents, employees, or contractors.

SEC. 80. *Infected and uninhabitable houses to be vacated.*—Whenever it shall be certified by an inspector or officer or agent of the board of health that a tenement house, or any part thereof, is infected with contagious disease, or that it is unfit for human habitation, or dangerous to life or health by reason of want of repair, or of defects in the drainage, plumbing, ventilation, or the construction of the same, or by reason of the existence on the premises of a nuisance likely to cause sickness among the occupants of said house, the board may issue an order requiring all persons therein to vacate such house, or part thereof, within not less than 24 hours nor more than 10 days, for the reasons to be mentioned in said order. In case such order is not complied with within the time specified, the board may cause said tenement house or part thereof to be vacated. The board whenever it is satisfied that the danger from said house or part thereof has ceased to exist, or that it is fit for human habitation, may revoke said order, or may extend the time within which to comply with the same.

(Sections 81 and 82 relate to fire protection.)

PART VI.

REQUIREMENTS AND REMEDIES.

SEC. 83. In a city which accepts the provisions of this act and in which the office of building inspector or a similar office does not exist, the mayor shall annually appoint an inspector of buildings.

SEC. 84. *Permit to commence building.*—Before the construction or alteration of a tenement house, or the alteration or conversion of a building for use as a tenement house, is begun, and before the construction or alteration of any building or structure on the same lot with a tenement house, the owner shall submit to the building inspector a detailed statement in writing, verified by the affidavit of the person making the same, of the specifications for such tenement house or building, upon blanks or forms to be furnished by such inspector, and also full and complete copies of the plans of the work, together with a plan of the lot on which the same is or is to be situated, showing the location, character, and size of all buildings thereon, and the exact dimensions of said lot, together with its description by metes and bounds. The said statement shall give in full the name and residence, by street and number, of the owner or owners of the tenement house or other building. If such construction, alteration, or conversion is proposed to be made by any other person than the owner of the land in fee, the statement shall contain the full name and residence, by street and number, not only of the owner of the land, but of every person interested in the tenement house, either as owner, lessee, or in any representative capacity. The affidavit shall allege that said specifications and plans are true and contain a correct description of such tenement house or other building, structure, lot, and proposed work. The statements and affidavit herein provided for may be made by the owner, or by the person who proposes to make the construction, alteration, or conversion, or by his agent. No person, however, shall be recognized as the agent of the owner unless he shall file with the building inspector a written instrument, signed by the owner, designating him as such agent. Any false swearing in a material point in any such affidavit shall be deemed perjury. The said specifications, plans, and statements shall be filed in the office of the building inspector and shall be public records, and no such specifications, plans, or statements shall be removed from the said office. The building inspector shall cause all such plans and specifications to be examined.

If such plans and specifications conform to the provisions of law, they shall be approved, in writing, by the building inspector, and he may from time to time approve changes in any plans and specifications, provided that the plans and specifications so altered are in conformity with law; but the building inspector shall not approve any plans or specifications or any changes in the same until the board of health has certified that the said plans and specifications conform to the law relative to light, ventilation, and sanitation. The construction, alteration or conversion of such tenement house, building, or structure, or any part thereof, shall not be begun until the filing of the said specifications, plans and statements, and the approval thereof, as above provided. The construction, alteration, or conversion of any such house, building, or structure shall be in accordance with the said approved specifications and plans. Any permit or approval which may be issued by the building inspector, but under which no work has been done above the foundation walls within one year after the issuance of the permit or approval, shall expire by limitation. Said inspector shall have power to revoke or cancel any permit or approval in case of any failure or neglect to comply with any provision of this act, or in case

any false statement or representation was made in any specifications, plans, or statements submitted or filed for such permit or approval.

SEC. 85. *Approval of construction.*—No building hereafter constructed as or altered into a tenement house shall be occupied in whole or in part for human habitation until the building conforms in all respects to the requirements of law. Upon notice of the completion of the construction, alteration or conversion of a tenement house, it shall be the duty of the building inspector and of the board of health to inspect the building forthwith, and it shall not be occupied as a place of habitation unless it conforms to the requirements of this act.

SEC. 86. *Procedure and penalties.*—Any court having jurisdiction in equity, or any justice thereof, shall upon the application of the city solicitor, building inspector, or the board of health of any city have jurisdiction in equity to restrain the construction, alteration, repair, maintenance, use, or occupation of a building or other structure in violation of the provisions of this act and to order its removal or abatement as a nuisance, and to compel compliance with any provision of this act.

SEC. 87. A building or other structure which is erected, altered, maintained, or used in violation of the provisions of this act shall be deemed a common nuisance without other proof thereof than proof of such unlawful construction, maintenance, or use, and the board of health may, if such violation is of any section of this act relative to light, ventilation, and sanitation, and the building inspector may, if said violation is of any other provision of this act, order the owner of said premises at his own expense to abate or remove said nuisance within 24 hours, or within such further time as said board of health or said building inspector, as the case may be, considers reasonable, after notice to be served in the manner provided in section 94; and if the owner or occupant fails to comply with such order, the board may abate or remove the nuisance, and all expenses incurred thereby shall be paid by the person who caused or permitted the same.

SEC. 88. Whoever violates any provision of this act shall be punished by a fine of not less than \$10. Any person who violates any provision of this act after he has been served with a notice or order as provided by section 94, or who fails to comply with such notice or order within 10 days after such service, or continues to violate any provision or requirement of this act in the respect named in such notice or order, shall be subject to an additional fine of not less than \$5 and not more than \$20 for each day after the first day during which the violation continues.

SEC. 89. Any person the value of whose property may be affected by any action of the board of health or of the building inspector may have the action of said board or inspector reviewed by the superior court by any appropriate process; *Provided*, That proceedings are instituted within 20 days after such action.

SEC. 90. Any person having any duty to perform in regard to any building or premises under the provisions of this act may, if it be necessary for the performance of such duty, enter any building or premises.

SEC. 91. *Liens.*—Every fine imposed by judgment under section 88 of this act upon a tenement house owner shall be a lien upon the house in relation to which the fine is imposed from the time of the filing of a certified copy of the judgment in the office of the register of deeds for the county or district in which the tenement house is situated, subject only to taxes, assessments, and water rates and other existing lawful incumbrances; and it shall be the duty of the board of health and the building inspector, upon the entry of said judg-

ment, forthwith to file the copy as aforesaid, and the copy, upon such filing, shall forthwith be properly indexed by the register of deeds.

SEC. 92. *Lis pendens.*—In any action or proceeding instituted by the officer or department charged with the enforcement of this act, the plaintiff or petitioner may file in the office of the register of deeds for the county or district where the property affected by such action or proceeding is situated a notice of the pendency of the action or proceeding. The register of deeds with whom the notice is filed shall record it, and shall index it under the name of each person against whom said proceeding is instituted. Any such notice may be vacated by the order of a justice of the court in which the action or proceeding was instituted or is pending. The register of deeds of the county or district where the notice is filed is hereby directed to mark the notice and any record or docket thereof as canceled of record upon the presentation and filing of a certified copy of such order.

SEC. 93. *Registry of owner's name.*—Every owner of a tenement house and every lessee of the whole house, or other person having control of a tenement house, shall file with the board of health a notice containing his name and address, and also a description of the property, by street and number or otherwise, as the case may be, in such manner as will enable the said board easily to find the same; and also the number of rooms in each apartment, and the number of families occupying the apartments. When the owner or agent is not a resident of the city the notice shall contain the name and address of some agent residing within the city for the purpose of receiving service of process, and notice to and service of process upon such agent shall bind the principal. Blanks for the said registration shall be provided by the board of health.

SEC. 94. *Service of notices and orders.*—Unless otherwise provided in this act, every notice or order in relation to a tenement house shall be served 10 days before the time for doing the thing in relation to which it is issued. The service of a notice or order as aforesaid shall be made by the delivery of an attested copy in hand to the owner or his agent, or by leaving an attested copy at the last or usual place of abode of the owner or agent, or, if the owner is a non-resident and has no agent duly appointed, it shall be placed in a conspicuous place in said tenement house and a copy thereof mailed by a registered letter, on the same day on which it is posted, to the owner or his agent at his residence.

SEC. 95. *Service of summons.*—In any action brought by any city official in relation to a tenement house for injunction, vacating of the premises, or other abatement of nuisance, or to establish a lien thereon, service of process shall be in the manner provided in the preceding section, except that the service of process shall be made only by a sheriff or one of his deputies or by a constable.

SEC. 96. *Indexing names.*—The names and addresses filed in accordance with section 93 shall be indexed by the board of health in such a manner that all of those filed in relation to each tenement house shall be together, and readily ascertainable. The board of health shall provide the necessary books and clerical assistance for that purpose, and the expense thereof shall be paid by the city. Said indexes shall be public records, open to public inspection during business hours.

SEC. 97. *Laws repealed.*—All acts and parts of acts inconsistent herewith are hereby repealed, and upon acceptance of this act by any city all ordinances of such city inconsistent herewith are hereby annulled.

SEC. 98. *When to take effect.*—This act shall not apply to the city of Boston, but it shall take effect in any other city upon its acceptance by a majority vote of the members of each branch of the city council or corresponding body of that city, present and voting thereon, and upon the approval of the mayor.

MINNESOTA.

Foodstuffs—Misbranding of. (Chap. 20, Act Feb. 25, 1913.)

SECTION 1. *Misbranding beverages a misdemeanor.*—Section 1774, Revised Laws of Minnesota, 1905, is hereby amended so as to read as follows, to wit:

"1774. *Misbranding.*—Any person who either fails to affix or display any brand, marking, label, card, or placard in the manner and form required by any section of this chapter, or who fails to fully or truthfully state thereon all things as in such section required, or who places thereon anything other than the specific data or information therein called for; any person who shall remove, erase, efface, obscure, or obliterate any such mark, brand, label, card, or placard so required by law; and any person who shall place upon any article designed or offered for sale or use as food or as a beverage, or any article mentioned in this chapter, or upon any receptacle or package containing the same, anything which might deceive or tend to deceive the purchaser as to the substance from which such article is made or which it contains, or in respect to its quality, strength, or quantity, or in respect to the source of its manufacture or production, or which conflicts with, confuses, or conceals any data or information required by this chapter to be set forth by the aforesaid mark, brand, label, card, or placard, shall be deemed guilty of a misdemeanor, which shall be known as misbranding; and the article concerning or upon which such misbranding is done shall be deemed a misbranded article."

Industrial Diseases—Notification of Cases Required. (Chap. 21, Act Feb. 25, 1913.)

SECTION 1. *Physicians to report certain cases of poison to commissioner of labor.*—Every physician attending on or called in to visit a patient whom he believes to be suffering from poisoning from lead, phosphorus, arsenic, or mercury, or their compounds, or from anthrax, or from compressed-air illness, contracted as a result of the nature of the patient's employment, shall send to the commissioner of labor a notice stating the name and full postal address and place of employment of the patient and the disease from which in the opinion of the physician the patient is suffering, with such other specific information as may be required by the commissioner of labor and which may be ascertained by the physician in the course of his duties.

SEC. 2. *Failure a misdemeanor.*—If any physician, when required by section 1 of this act to send a notice, fails forthwith to send same, he shall be guilty of a misdemeanor and upon conviction shall be punished by a fine not exceeding \$10, or by imprisonment in the county jail for not exceeding 10 days.

SEC. 3. *To be enforced by labor commission.*—It shall be the duty of the commissioner of labor to enforce the provisions of this section, and he may call upon the State and local boards of health for assistance.

SEC. 4. This act shall take effect and be in force from and after July, 1913.

Rabies—Muzzling of Dogs. (Chap. 541, Act Apr. 26, 1913.)

SECTION 1. *Report as to rabies to be made to live stock sanitary board.*—It shall be the duty of the executive officer of the live stock sanitary board, the chief health officer of every city, the executive officer of each town and village board of health, when complaint in writing shall have been made to him that rabies exists in any town, village, or city over which his jurisdiction extends, and for the purposes of this act the jurisdiction of the State officer hereinbefore named shall extend to any town, village, or city in this State, to investigate, either personally or through the agency of subordinate officers under his

jurisdiction as to the truth of any such complaint, and determine whether or not rabies does exist in any such town, village, or city. Any such officer may on his own motion and without such complaint likewise make such an investigation and determination. The fact that any executive officer of any town, city, or village has investigated and determined that rabies does not exist in the territory over which he has jurisdiction shall not deprive the executive officer of the live stock sanitary board of jurisdiction or authority to make such an investigation and determination with reference to such territory.

SEC. 2. Proclamation to be issued.—If on such investigation any such officer finds and determines that rabies does exist in any town, city, or village, he shall forthwith and thereupon make and file, as hereinafter provided, a proclamation, setting forth the fact of such investigation and determination, and also in and by said proclamation prohibit the owner or custodian of any dog from permitting or allowing such dog to be at large within such town, city, or village, designating it, unless such dog shall be so effectually muzzled that it can not bite any other animal or any person. Such proclamation, when issued by the executive officer of a town or village board of health, shall be filed with the town or village clerk, respectively; when issued by the chief health officer of a city it shall be filed with the city clerk; when issued by the State official hereinbefore named, it shall be filed with the clerk of the town, village, or city to which it relates. It shall be the duty of the officer with whom such proclamation is filed as aforesaid, to forthwith publish a copy thereof (once) at the expense of his municipality, in a legal newspaper published in the town, village, or city to which such proclamation relates, if such a paper is published therein, and if there be no newspaper published therein, then to post a copy of such proclamation in three public places therein. Proof of publication shall be made by affidavit of the publisher in the one case and of posting in the other, by the person posting the same, which affidavit shall be filed with the proclamation. Such proclamation shall be deemed effective and in full force five days after the publication or posting of copies thereof, as hereinbefore provided for, and shall remain in full force and effect for a period of time therein designated, not exceeding six months, as shall be determined by the officer making such proclamation.

SEC. 3. Dogs prohibited from running at large during period of proclamation.—It shall be unlawful for the owner or custodian of any dog to suffer or permit it to be at large, either on the premises of the owner or elsewhere, within any city, village, or town wherein and as to which any such proclamation shall have been made, during the time such proclamation is in force, unless such dog shall be effectively muzzled so that it can not bite any other animal or any person. It shall be lawful for any person to kill any dog running at large on the public streets or roads in violation of the provisions of this act, and the owner or owners of any dog so killed shall have no claim against the person so killing any such dog. Any person violating the provisions of this act shall be guilty of a misdemeanor. It shall be the duty of all peace officers and all health officers to make complaint of any known violation of this act.

PENNSYLVANIA.

Night Soil—Use as Fertilizer. (Act 165, May 20, 1913.)

SECTION 1. That it shall be unlawful to use night soil as a fertilizer, or otherwise, on any ground on which vegetables of a variety or varieties which are eaten uncooked for human food are being grown: *Provided, however,* That the term "night soil," for the purposes of this act, shall be construed to include

only human excrement, and the contents of privy wells; and that any such night soil which shall have been treated by any process approved by the commissioner of health of the State department of health, to remove its objectionable features, shall not be within the prohibition of this act.

SEC. 2. Any person, firm, or corporation violating any of the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not less than \$25 or more than \$100 for each offense, or imprisoned for not more than two months, or both, in the discretion of the court.

SEC. 3. This act shall take effect on the 1st day of September, 1914.

SEC. 4. All acts or parts of acts inconsistent herewith are hereby repealed.

Ophthalmia Neonatorum—Reporting of Cases and of Treatment Required. (Act 295, June 5, 1913.)

SECTION 1. That every physician practicing in any portion of this Commonwealth who shall treat or examine any infant suffering from ophthalmia neonatorum (inflammation of the eyes of infants) shall, if the said case be located in a township of the first class, a borough, or a city, forthwith make a report in writing to the health authorities of said township, city, or borough; and, if said case shall be located in a township of the second class, or a city, borough, or township of the first class, not having a board of health, or body acting as such, to the State department of health, upon blanks supplied for that purpose; in which report he shall, under his or her own signature, state the name of the disease, and the name, age, sex, color, and nativity of the infant suffering therefrom, together with the street and house number of the premises in which said infant may be located, or otherwise sufficiently designate the same, the date of the onset of the disease, the name and occupation of the householder in whose family the disease may have occurred; together with such other information relating to said case as may be required by said health authorities and the State department of health.

SEC. 2. That any midwife, or nurse, or other person having the care of an infant whose eyes have become inflamed or swollen or reddened at any time within two weeks after birth, shall report the same, in writing, to the health authorities of the city, borough, or township of the first class in which the case may be located; or, if it be located in a township of the second class, or a city, borough, or township of the first class, not having a board of health, or body acting as such, the State department of health, within six hours after the discovery thereof, giving the name of the infant, the names of the parents or guardians, and the street and number of their residence, or otherwise sufficiently designate the same, together with the fact that such inflammation or swelling or redness exists, and shall make a similar report in writing to some regularly qualified practicing physician of the district.

SEC. 3. That it shall be the duty of the said health authorities or the State department of health, immediately upon receipt of a written report from a midwife or a nurse, or person other than a practicing physician, to notify the parents or guardian, or other person having charge of the infant, of the danger to the eyes or eye of said infant by reason of any neglect of proper treatment of the same.

SEC. 4. Every physician in this Commonwealth who shall treat any infant's eyes for ophthalmia neonatorum (inflammation of the eyes of an infant) shall, within 48 hours after said physician ceases treatment of or attendance upon such case of ophthalmia neonatorum, report to the commissioner of health of the Commonwealth of Pennsylvania that said physician has treated a certain case of ophthalmia neonatorum, giving full information as required in section

1 of this act, stating that he has ceased treatment of or attendance upon said case, and what was condition of infant's eyes when physician ceased treatment of or attendance upon said case of ophthalmia neonatorum.

SEC. 5. Every health officer shall furnish a copy of this act to every person who is known to him to act as a midwife or nurse in the city, borough, or township for which he is health officer; and the commissioner of health of this Commonwealth of Pennsylvania shall cause a sufficient number of copies of this act to be printed and supplied to the health officers.

SEC. 6. Any physician, midwife, nurse, or other person who shall violate any of the provisions of this act shall, upon conviction thereof in a summary proceeding before any justice of the peace or alderman of the county wherein such offense was committed, be sentenced to pay a fine of not less than \$20 or more than \$100, to be paid to the use of the said county, and the costs of prosecution, or to be imprisoned in the county jail for a period of not less than 10 or more than 30 days, or both, at the discretion of the court.

SEC. 7. An "Act for the prevention of blindness, imposing a duty upon all midwives, nurses, or other persons having the care of infants, and also upon the health officers, and fixing penalties for neglect thereof," approved the 26th day of June, A. D. 1895, be, and the same is hereby, repealed.

Boards of Health in Boroughs and Townships of the First Class—Organization, Powers, and Duties. (Act 316, June 12, 1913.)

SECTION 1. That a board of health shall be established and maintained in each borough and township of the first class in this Commonwealth within three months after the passage of this act.

SEC. 2. The board of health shall be composed of five members, at least one of whom shall be a reputable physician of not less than two years' experience in the practice of his profession. The members of the board of health shall be appointed by the president of the borough councils, or by the chairman of the board of commissioners of such township. At the first appointment one member shall be appointed to serve for one year, one for two years, one for three years, one for four years, and one for five years; and thereafter one member shall, in like manner, be appointed each year, to serve for five years. The members of the board of health shall be residents of the municipality for which they are appointed, and shall serve without compensation: *Provided, however,* If any member of the board shall be elected to the office of secretary, he shall be entitled to receive a salary, fixed by the board, for that office.

SEC. 3. The members of the board shall severally take and subscribe to the oath prescribed for borough or township officers, and shall annually organize by electing a president from among the members of the board, a secretary, who may or may not be a member of the board, and a health officer, who shall not be a member of the board. The secretary and the health officer shall receive such salary as may be fixed by the board, and ratified by the borough council or by the board of commissioners of the township of the first class, and shall serve for a period of one year, or until such time thereafter as their successors may be elected and qualified. They shall severally give bond to the borough or township in such sums as may be fixed by ordinance for the faithful discharge of their duties, and shall also take and subscribe to the oath required by members of the board.

SEC. 4. The secretary of the board shall keep the minutes of their proceedings; shall keep accurate accounts of the expenditures of the board; shall draw and certify, under the seal of the board of health, all orders upon the treasurers of the borough or township of the first class for the payment of

moneys on account of the board of health, and shall present the same to the president of the board for his approval; shall render statements for the expenditures to the board at each stated meeting, or as frequently as they may require; shall prepare, under the directions of the board, the annual report to the borough council or township commissioners, together with the estimate of appropriation needed for the ensuing year; he shall report to the State department of health at the end of each week, and for the fraction of each week occurring at the end of each month, the cases of communicable disease reported to the board of health, on the form provided for that purpose by the State department of health; and shall also make an annual report to the State department of health; and shall make such other reports and perform such other duties as the board may require.

SEC. 5. It shall be the duty of the health officer to attend all stated and special meetings of the board of health, and at all times be ready and available for the prompt performance of his official duties. He shall placard and quarantine all premises upon which cases of communicable disease exist, which have been reported to the board of health or of which he or the board of health may have knowledge, which are required by law, or by regulation of the State department of health or of the local board of health, to be placarded and quarantined; and shall disinfect such premises upon the expiration of the quarantine period and the recovery of the last person therein suffering from such disease. He shall serve written notice on teachers and persons in charge of public, parochial, Sunday, and other schools requiring the exclusion from school of children who are suffering from or who reside in the same premises with other persons who are suffering from communicable diseases; and shall make sanitary inspections, and shall execute the orders of the board of health, and shall in the performance of his duties have the power and authority of a policeman.

SEC. 6. The said board of health shall have the power, and it shall be their duty, to enforce the laws of the Commonwealth, the regulations of the State department of health, and such further regulations as the board may see fit to adopt for the control of communicable disease and the prevention of infections therefrom. They shall also have power with the consent of councils, in case of a prevalence, or apprehended prevalence, of any contagious or infectious diseases in their borough or township, to establish one or more emergency hospitals and to make provisions and regulations for the management of the same.

SEC. 7. Said board of health shall have the power as a body, or by committee, as well as the health officer, together with their assistants, subordinates, and workmen, under and by order of the said board, to enter at any time upon any premises in the borough or township upon which there is suspected to be any infectious or contagious disease, or nuisance detrimental to the public health, for the purpose of examining and abating the same.

SEC. 8. The board of health may inspect house drains, waste and soil pipes, cesspools, water-closets, slaughterhouses, hogpens, stables, stable yards, and any conditions or places whatsoever, in the borough or township of the first class, which may constitute a nuisance or a menace to public health; and whenever any condition or place in the borough or township of the first class is found by them to be a nuisance or a menace to the health of the people of the borough or township of the first class, they shall issue a written order of abatement, directed to the owner, or agent of the owner, of the premises, stating that the conditions specified therein constitute a nuisance or a menace to health, and ordering an abatement thereof within such time as may be specified by them in such order. In case such order of abatement is not

obeyed within the time specified therein, they shall thereupon issue a further written order to the health officer, directing him to remove or abate the same, which order shall be executed by him and his subordinates and workmen, and the expense thereof shall be recoverable from the owner of the premises upon or from which the nuisance or menace to health is abated or removed in the same manner as debts of like character are now collected by law; or the said board of health may proceed to enforce such other remedy, or inflict such penalty, as may by ordinance of the borough or township of the first class be provided.

SEC. 9. It shall be the duty of the board of health to submit annually to the councils or township commissioners before the commencement of the fiscal year an estimate of the probable expenditures of the board during the ensuing year; and councils or township commissioners shall then proceed to make such appropriation thereto as may be necessary; and the said board shall, in the month of January of each year, submit a report in writing to councils or township commissioners of its operations and expenditures for the preceding year, together with such other information on subjects relative to the sanitary conditions or requirements of the borough or township as may be necessary, and councils or township commissioners shall publish the same in their official journal.

SEC. 10. Whenever in the opinion of the commissioner of health of the Commonwealth of Pennsylvania conditions found by him to exist in any borough or township of the first class in this Commonwealth shall constitute a menace to the lives and health of people living outside the corporate limits of such borough or first-class township, or if it be known to him that any borough or township of the first class is without an existing or efficient board of health, the commissioner of health may enter and take full charge of and administer the health laws, regulations, and ordinances in such borough or township of the first class, and may continue in charge thereof until he shall decide that a competent, efficient board of health has been appointed and qualified for such borough or township of the first class, and is ready, able, and willing to assume and carry into effect the duties imposed upon it by law.

SEC. 11. All expenses incurred by any local board of health, its officers or employees, in the performance of the duties imposed upon it by law, and all expenses incurred by the commissioner of health in accordance with the provisions of section 10 of this act, shall be paid by the borough or township of the first class wherein such duties are performed, in the same manner as other expenses of such borough or township of the first class are paid.

SEC. 12. Whenever expenses incurred by the commissioner of health in the administration of health laws in any borough or township of the first class, in accordance with the provisions of this act, shall remain unpaid by said borough or township of the first class for a period of over three months after a statement of such expense has been rendered by him to such borough or township of the first class, and demand for payment by him made, he shall, with the approval of the governor, institute, in the name of the Commonwealth as plaintiff, an action of assumpsit against such borough or township of the first class for the collection of such expense from the borough or township of the first class, in the same manner as debts of like amount are collected by law: *Provided, however,* That upon the trial of any such action of assumpsit, the reasonableness of the expenditures made by the commissioner of health shall be submitted to the jury for its determination.

SEC. 13. All expenses incurred by the commissioner of health in the administration of health laws in any borough or township of the first class, when paid to him by such borough or township of the first class, or when collected by him,

shall be returned by him to the State treasurer, who shall credit the amount so received to the appropriation made to the department of health.

SEC. 14. An act entitled "An act to enable borough councils to establish boards of health," approved the 11th day of May, A. D. 1893; and "An act to enable the township commissioners of townships of the first class in this Commonwealth to establish boards of health, and providing for the payment of the expenses thereof by the township," approved the 29th day of May, A. D. 1907; and all other acts or parts of acts inconsistent herewith be, and the same are hereby, repealed: *Provided*, That all boards of health now in existence in boroughs and townships of the first class shall continue to act as such until the board of health created by this act is appointed and qualified.

Tenement Houses—Bureau of Housing Established. (Act 459, July 24, 1913.)

SECTION 1. That a bureau of housing be established in the State department of health, with such executive and clerical staff as may be necessary to carry into effect the provisions of this act throughout the Commonwealth, with the exception of cities of the first class. And the commissioner of health, with the consent of the governor, is hereby authorized to designate such persons, prescribe their titles and respective duties, and fix their compensation.

SEC. 2. It shall be the duty of said bureau to investigate the sanitary conditions of tenement, lodging, and boarding houses, and when the same are found, in the opinion of said bureau, to be a menace to those occupying the same, or employed therein, or to be overcrowded, to condemn the same, and to notify the owners or agents thereof in writing, setting forth the insanitary or overcrowded conditions thereof, and specifying in writing the changes or alterations which shall be made thereto for the purpose of relieving such conditions, and further specifying the time within which such changes or alterations shall be completed or overcrowding relieved. A duplicate copy of such notification and service thereof, attested by the officer or agent making the same on behalf of the bureau, shall, immediately after the service thereof, be filed in the court of common pleas of the county in which such condemned dwelling, premises, or other building is located; and if no appeal be filed within 10 days, by the owner or agent, after service of such notice, then an appeal shall be allowed only upon direct order of the court.

SEC. 3. Any appeal from the notification of said bureau through its authorized agents shall set forth the specific facts upon which the appeal is based, and upon filing said appeal the court of common pleas shall designate three disinterested persons to examine the buildings, dwellings, and premises, and report their conclusions whether the appeal should be dismissed, or the order of the bureau enforced, or in any way modified. Any such finding upon review and hearing by the court shall become final. The court shall have the right to fix the compensation of the persons so appointed, and such amount shall be paid by the appellant when the findings sustain in whole or in part the notification of said bureau. Upon the expiration of the time designated in the reports to the said court, where no appeal is taken, or from the final order, after appeal, the names of those who have failed to comply, either with the notice of said bureau, or the court's order based upon appeal, shall be certified by the officer or agent of said bureau to the district attorney, who, upon receipt of the same, shall cause a prosecution to be at once instituted against such person or persons.

SEC. 4. The officers or agent of this bureau shall have at all times the right of ingress into all premises as aforementioned.

SEC. 5. Any owner or agent of any premises condemned as insanitary or overcrowded, who shall neglect to comply with the order of said bureau, or with

the order of court after appeal, and who may continue to rent or use such premises in violation thereof, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined \$20 per day for each day which the premises shall have been used, and, in default of payment of the same, shall be committed to the county jail for such period as the court may direct. And these penalties shall apply to the officers of corporations, or members of firms, either as owners or agents.

SEC. 6. And any owner, agent, or occupant who interferes with, or prevents ingress to, any officer or agent of this bureau, or to the persons designated by the court for the purposes aforesaid, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined not less than \$50 nor more than \$100 for each and every such offense, or suffer an imprisonment of not more than 60 days, either or both, at the discretion of the court.

SEC. 7. The necessary expenses for the salaries of officers and employees, and for the operation of this bureau, shall be paid from the general appropriation to the department of health in the form and manner prescribed for other disbursements.

SEC. 8. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Industrial Diseases—Prevention of. (Act 851, July 26, 1913.)

SECTION 1. That every employer shall, without cost to the employees, provide reasonably effective devices, means, and methods to prevent the contraction by his employees of any illness or disease incident to the work or process in which such employees are engaged in the industries and occupations specified in section 2 of this act.

SEC. 2. Every work or process in the manufacture of white lead, red lead, litharge, sugar of lead, arsenate of lead, lead chromate, lead sulphate, lead nitrate, or fluosilicate is hereby declared to be especially dangerous to the health of the employees who, while engaged in such work or process, are exposed to lead dusts, lead fumes, or lead solutions.

SEC. 3. Every employer shall, without cost to the employees, provide the following devices, means, and methods for the protection of his employees who, while engaged in any work or process included in section 2, are exposed to lead dusts, lead fumes, or lead solutions:

(a) The employer shall provide and maintain workrooms adequately lighted and ventilated and so arranged that there is a continuous and sufficient change of air; and all such rooms shall be fully separated by partition walls from all departments in which the work or process is of nondusty character; and all such rooms shall be provided with a floor permitting an easy removal of dust by wet methods or vacuum cleaning, and all such floors shall be so cleaned daily. Every work or process referred to in section 2, including the corroding or oxidizing of lead and the crushing, mixing, sifting, grinding, and packing of all lead salts or other compounds referred to in section 2, shall be so conducted and such adequate devices provided and maintained by the employer as to protect the employee as far as possible from contact with lead dust or lead fumes. Every kettle, vessel, receptacle, or furnace in which lead in any form referred to in section 2 is being melted or treated and any place where the contents of such kettles, receptacles, or furnaces are discharged shall be provided with a hood connected with an efficient air exhaust; all vessels or containers in which dry lead in any chemical form or combination referred to in section 2 is being conveyed from one place to another within the factory shall be equipped, at the places where the same are filled or discharged, with hoods

having connection with an efficient air exhaust; and all hoppers, chutes, conveyers, elevators, separators, vents from separators dumps, pulverizers, chasers, dry pans, or other apparatus for drying pulp lead, dry pans, dump, and all barrel packers and cars, or other receptacles into which corrosions are at the time being emptied shall be connected with an efficient dust-collecting system, such system to be regulated by the discharge of air from a fan, pump, or other apparatus, either through a cloth dust collector, having an area of not less than one-half square foot of cloth to every cubic foot of air passing through it per minute, the dust collector to be placed in a separate room, which no employee shall be required or allowed to enter except for essential repairs while the works are in operation, or such other apparatus as will efficiently remove the lead dusts from the air of the workrooms.

(b) The employer shall provide a wash room or rooms, which shall be separate from the workrooms, be kept clean, and be equipped with:

(1) Lavatory basins, fitted with waste pipes and two spigots conveying hot and cold water; or

(2) Basins placed in troughs fitted with waste pipes, and for each basin two spigots conveyings hot and cold water; or

(3) Troughs of enamel, or similar smooth impervious material, fitted with waste pipes, and for every 2 feet of trough length two spigots conveying hot and cold water.

Where basins are provided there shall be at least one basin for every five such employees, and where troughs are provided, at least 2 feet of trough length for every five such employees. The employer shall also furnish nail-brushes and soap, and shall provide at least three clean towels per week for each such employee. A time allowance of not less than 10 minutes, at the employer's expense shall be made to each such employee for the use of said washroom before the lunch hour and at the close of the day's work.

The employer engaged in the manufacture of white lead, red lead, litharge, sugar of lead, arsenate of lead, lead chromate, lead sulphate, lead nitrate, or fluosilicate shall also provide at least one shower bath for every 10 such employees. The baths shall be approached by wooden runways, be provided with movable wooden floor gratings, be supplied with controlled hot and cold water, and be kept clean. The employer shall furnish soap and shall provide at least two clean bath towels per week for each such employee. An additional time allowance of not less than 10 minutes, at the employer's expense, shall be made to each such employee for the use of said baths, at least twice a week, at the close of the day's work. The employer shall keep a record of each time that such baths are used by each employee, which record shall be open to inspection at all reasonable times by the State department of labor and industry and also by the State department of health.

(c) The employer shall provide a dressing room or rooms, which shall be separate from the workrooms, be furnished with a double sanitary locker or two single sanitary lockers for each such employee, and be kept clean.

(d) The employer shall provide an eating room or eating rooms, which shall be separate from the workrooms, be furnished with a sufficient number of tables and seats, and be kept clean. No employee shall take, or be allowed to take, any food or drink of any kind into any workroom, nor shall any employee remain, or be allowed to remain, in any workroom during the time allowed for his meals.

(e) The employer shall provide and maintain a sufficient number of sanitary drinking fountains, readily accessible for the use of employees.

(f) The employer shall provide at least one pair of overalls and one pair of jumpers for each such employee and repair or renew such clothing when necessary and wash the same weekly.

(g) The employer shall provide and renew, when necessary, at least one reasonably effective respirator for each employee who is engaged in any work or process included in section 2.

SEC. 4. Every employee who, while engaged in any work or process included in section 2, is exposed to lead dusts, lead fumes, or lead solutions, shall—

(a) Use the washing facilities provided by the employer in accord with section 3 (b), and wash himself at least as often as a time allowance is therein granted for such use;

(b) Use the eating room provided by the employer in accord with section 3 (d), unless the employee goes off the premises for his meals;

(c) Put on, and wear at all times while engaged in such work or process, a suit of the clothing provided by the employer in accord with section 3 (f), and remove the same before leaving at the close of the day's work, and keep his street clothes and his working clothes, when not in use, in separate lockers or separate parts of the locker provided by the employer in accord with section 3 (c);

(d) Keep clean the respirators provided by the employer in accord with section 3 (g), and use one at all times while he is engaged in any work or process included in section 2 of this act.

SEC. 5. The employer shall post in a conspicuous place in every workroom where any work or process included in section 2 is carried on, in every room where washing facilities are provided, and in every dressing room and eating room, a notice of the known dangers arising from such work or process, and simple instructions for avoiding as far as possible such dangers. The commission of labor and industry shall prepare a notice containing the provisions of this act, and shall furnish free of cost a reasonable number of copies thereof to every employer included in section 2, and the employer shall post copies thereof in the manner hereinbefore stated. The notices required in this section shall be printed in plain type, on cardboard, and shall be in English and in such other languages as the circumstances may reasonably require. The contents of such notices shall be explained to every employee by the employer when the said employee enters employment in such work or process, interpreters being provided by the employer when necessary to carry out the above requirements.

SEC. 6. The employer shall cause every employee who, while engaged in any work or process included in section 2, is exposed to lead dusts, lead fumes, or lead solutions, to be examined at least once a month, for the purpose of ascertaining if symptoms of lead poisoning appear in any employee. The employee shall submit himself to the monthly examination and to examination at such other times and places as he may reasonably be requested by the employer, and he shall fully and truly answer all questions bearing on lead poisoning asked him by the examining physician. The examinations shall be made by a licensed physician designated and paid by the employer and shall be made during the working hours, a time allowance therefor at the employer's expense being made to each employee so examined.

SEC. 7. Every physician making an examination under section 6 and finding what he believes to be symptoms of lead poisoning shall enter, in a book kept for that purpose in the office of the employer, a record of such examination, containing the name and address of the employee so examined, the particular work or process in which he is engaged, the date, place, and finding of such examination, and the directions given in each case by the physician. The record shall be open to inspection at all reasonable times by the State department of labor and industry and by the State department of health. Within

48 hours after such examination and finding the examining physician shall send a report thereof, in duplicate—one copy to the State department of labor and industry and one to the State department of health. The report shall be on, or in conformity with, blanks to be prepared and furnished by the State department of health, free of cost, to every employer included in section 2, and shall state (a) name, occupation, and address of employee; (b) name, business, and address of employer; (c) nature and probable extent of disease; and (d) such other information as may be reasonably required by the State department of health. The examination physician shall also within the said 48 hours report such examination and finding to the employer; and after five days from such report the employer shall not continue the said employee in any work or process where he will be exposed to lead dusts, lead fumes, or lead solutions included in section 2 of this act.

SEC. 8. The State department of labor and industry shall enforce this act and prosecute all violations of the same. The officers, or their agents, of the said department shall be allowed at all reasonable times to inspect any place of employment included in this act. Every employer who, either personally or through any agent, violates or fails to comply with any provision of section 1 or section 3 shall be guilty of a misdemeanor and, on conviction for the first offense, shall be sentenced to pay a fine of not less than \$100 nor more than \$200, and on conviction for a second offense shall be sentenced to pay a fine of not less than \$200 nor more than \$500, and on conviction for each subsequent offense shall be sentenced to pay a fine of not less than \$300 nor more than \$1,000; and in each case he shall stand committed until such fine and the costs are paid, or until he is otherwise discharged by due process of law. Every employee who violates or fails to comply with any provision of section 4 shall be guilty of a misdemeanor and, on conviction for the first offense, shall be sentenced to pay a fine of not less than \$10 nor more than \$20, and on conviction for the second offense shall be sentenced to pay a fine of not less than \$20 nor more than \$50, and on conviction for each subsequent offense not less than \$30 nor more than \$100; and in each case he shall stand committed until such fine and the costs are paid, or until he is otherwise discharged by due process of law. Every employer who, either personally or through any agent, violates or fails to comply with any provision of sections 5, 6, or 7 relating to him, and every employee who violates or fails to comply with the provisions of section 6 relating to him, shall be guilty of a misdemeanor and, on conviction thereof, shall be sentenced to pay a fine of not less than \$10 nor more than \$100.

SEC. 10. In this act, unless the context otherwise requires, "employer" includes persons, firms, partnerships, limited partnerships, and corporations.

SEC. 11. For the purpose of determining the constitutionality of any provision of this act section 1 hereof is declared to be independent of and separable from the remaining sections.

SEC. 12. This act shall take effect on the 1st day of October, 1913, except as to subdivisions (a), (b), (c), and (d) of section 3, which subdivisions shall take effect as follows:

Subdivisions (b), (c), and (d) of section 3, on the 1st day of October, 1914;

Subdivision (a) of section 3, on the 1st day of October, 1915.

PHILIPPINE ISLANDS.**Vessels—Sanitary Regulations for. (Philippine Marine Regulations, Jan. 1, 1913.)**

PARAGRAPH 57. A Government sanitary inspector of vessels at the port of Manila may be appointed by the insular collector of customs. The duties of such sanitary inspector shall be to inspect carefully all passenger-carrying vessels and compel compliance with the sanitary regulations prescribed herein.

PAR. 58. All sanitary inspections of vessels shall be made by daylight, as late as practicable before sailing, and before the passengers go aboard, if possible. Prior to stowing cargo or receiving passengers vessels shall be mechanically clean in all parts, especially the holds, forecastle, steerage quarters, and state-rooms, and the bilges and limbers free from dirt and deposit; and any portion of a vessel liable to have been infected by a communicable disease shall be thoroughly disinfected before sailing. The air space, ventilation, food and water supply, hospital accommodations, and all other analogous matters shall be promotive of the health and comfort of the passengers and crews of all vessels.

PAR. 59. Only distilled or sterilized water shall be issued to the passengers or crews of vessels for drinking purposes. The sanitary inspector shall from time to time obtain samples of the drinking water used on vessels and submit them to the proper authorities for determination of their purity. At the end of every voyage the tanks carrying water for drinking purposes shall be emptied and thoroughly treated with live steam before being refilled. Clean water shall be furnished for bathing purposes.

PAR. 60. Galleys, or places where food is prepared for eating, shall be located as far as possible from all water-closets or urinals, and no garbage or other waste material shall be allowed to collect either in receptacles or on the decks in or about the galleys, but shall be disposed of without delay. If garbage chutes are used they shall be kept clean by daily washings with sand and water, and shall be further cleansed at the end of each voyage in the manner herein prescribed for ice boxes. Cooked food left standing in the galleys or any other part of the ship shall be protected from flies by the use of proper screens. All utensils of whatever kind used in the galleys shall be rendered mechanically clean by the use of boiling hot water and a suitable washing powder or sand after every time of using.

PAR. 61. Ice boxes shall be emptied and thoroughly cleansed with boiling hot water at least once weekly, and at the end of each voyage they shall be thoroughly washed out with a solution of potassium permanganate in the strength of 1 to 3,000. (A solution sufficient in quantity for the ordinary ice box may be made by dissolving 260 centigrams, or 40 grains, of the crystals of permanganate of potash in 8 liters, or 2 gallons, of water.)

PAR. 62. The decks of all vessels engaged in the general coastwise traffic shall be washed down with sand and water daily, and those portions occupied by steerage passengers at least twice daily. Portions of unused food or other debris shall not be allowed to collect on the decks or in the scuppers.

PAR. 63. All passenger-carrying vessels engaged in the coastwise trade shall have a sufficient supply of linen tablecloths and napkins for dining tables to insure that those in use shall be clean. All cooking and table utensils and crockery shall be thoroughly washed with boiling hot water after every time of using. Bed linen, toilet articles, and other equipment in staterooms and steerage shall be of standard quality and shall be kept scrupulously clean.

PAR. 64. Water-closets for each class of passengers, sufficient in size and number to meet their requirements, shall be supplied on all certified passenger-carrying vessels; and in addition to those provided for third-class passengers there shall be a water-closet for the exclusive use of the crew, when, in the judgment of the insular collector of customs, this is necessary. Water-closets shall be well ventilated and shall be kept in a cleanly and sanitary condition by proper flushing after each time of using and by thorough washing down at least once daily. They shall be kept free from offensive odors by daily treatment with a 10 per cent solution of formalin or other approved disinfectant. It shall be the duty of the ship's officers to prevent the crew and steerage passengers from depositing excreta upon the decks or in the scuppers or in any place aboard other than the water-closets provided for herein; and said officers shall be held responsible if this or any other sanitary provision is not carried out properly.

PAR. 65. One or more bathrooms for each class of passengers shall be supplied on all passenger-carrying vessels making regular voyages of more than 36 hours' duration, and ships' officers shall be held responsible for the sanitary condition of bathrooms and surroundings.

PAR. 66. Cooks, stewards, and all other persons engaged in preparing or serving food shall be free from dangerous communicable diseases, and the sanitary inspector shall report all suspected violations of this regulation to the collector of customs, who will request the quarantine officer of the port to ascertain if the suspected person is so infected.

PAR. 67. No passenger or member of the crew shall be allowed to expectorate on the decks or in the scuppers of vessels, and ships' officers shall be held responsible for the enforcement of this prohibition.

PAR. 68. Masters shall make an inspection of their vessels each day when at sea for the purpose of maintaining a rigorous cleanliness in all portions thereof, and shall take such measures as may be necessary to destroy rats, mice, roaches, and other vermin.

PAR. 69. That class of light-draft vessels known as ferryboats plying on the waters of Manila Bay, Pasig River, and Laguna de Bay, and all other vessels having the status of ferryboats which navigate in Philippine waters shall be equipped as follows: Each such vessel shall be provided with a galvanized-iron water can of ample size, having a faucet and a tight-fitting cover secured with a lock. Said water cans shall be placed high enough from the deck so that faucets may be easily reached. Nothing but boiled or distilled water shall be put into these cans. There shall be installed in a suitable place or room a sufficient number of pails of the dry-earth variety for the accommodation of the average number of passengers carried. Several extra clean pails shall always be carried for use in case of necessity. Under no conditions are these pails to be emptied into the river; but upon return to Manila or to hailing port they shall be turned over to the city department of sanitation and transportation for disposal, and clean pails shall be received from that department to take their place. Galvanized-iron garbage cans of sufficient size, with tight-fitting covers, shall be installed and shall be placed at night on the river shore for emptying by the regular city scavengers. A kitchen sink for the purpose of washing dishes shall be installed, with a drainage pipe connected thereto. A urinal of the trough variety shall be installed for the use of male passengers, arranged so as to be kept constantly flushed by running water, the drainage pipe therefrom to be led overboard.

(a) The foregoing provisions as to dry-earth and garbage pails shall not apply when the local United States Marine-Hospital Corps medical officer, or where

there is no such officer the chief medical officer of the government of the Philippine Islands, shall certify that the use of such dry-earth and garbage palls on ferryboats plying in his district is unnecessary.

PAR. 70. The Government sanitary inspector of vessels shall satisfy himself by personal inspection that the conditions required by these regulations have been complied with, and shall so certify to the collector of customs before clearance is granted.

PAR. 71. The failure of any vessel owner, agent, or master to comply with these regulations or the personal instructions of the sanitary inspector relating to sanitation and cleanliness shall be immediately reported to the collector of customs.

PAR. 72. At all ports of the Philippine Islands other than Manila the surveyors or other officers designated by the collector of customs shall be sanitary inspectors of vessels for the enforcement of the sanitary regulations herein provided.

PAR. 73. The sanitary provisions herein contained shall not be considered as abrogating quarantine rules and regulations now or hereafter in force.

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